

Farragut Land Use and Transportation Policy Plan

2001 – 2011



February 2001

Farragut Land Use and Transportation Policy Plan 2001 - 2011

Prepared For
The Farragut Board of Mayor and Aldermen
W. Edward Ford III, Mayor

Developed By
Municipal Planning Commission
Bob Hill, Chairman

The Farragut Land Use Plan Committee

Farragut Town Staff

Ruth Viergutz Hawk

Mark Shipley

Assisted By
The Local Planning Assistance Office
Tennessee Department of Economic and Community Development
East Tennessee Region
Knoxville, Tennessee

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FARRAGUT LAND USE AND TRANSPORTATION POLICY PLAN 2001 - 2011

Executive Summary

The Farragut Land Use and Transportation Policy Plan (Plan) provides adopted goals, objectives, and policies for future development of land and transportation facilities in the Town of Farragut for a planning period of approximately ten years, 2001-2011. The objective of the Plan, as outlined in Section 13-4-203 of the Tennessee Code Annotated, is to serve as a guide for "accomplishing a coordinated, adjusted and harmonious development of the municipality which will, in accordance with existing and future needs, best promote public health, safety, order, convenience, prosperity, and general welfare as well as efficiency and economy in the process of development."

The Plan contains a brief history of the Town of Farragut and provides an inventory of the natural and socio-economic factors that will affect future development in the Town (Chapters 1-4). The Plan also provides an inventory of existing land uses and transportation facilities (Chapter 5). General land-development and transportation goals, objectives, and policies for the Town are given in Chapter 6. Examples of these policies are: (1) require pedestrian and bicycle links to all new developments; (2) incorporate sidewalks and trails into new road projects; (3) encourage a variety of new residential developments, with emphasis on incorporating the natural surroundings of a tract; (4) encourage in-fill of commercial development, instead of continuing to sprawl; (5) encourage redevelopment of existing, older commercial sites; (6) seek grant funds to expand the Farragut park system and add more recreational opportunities; (7) encourage all development to proceed in an environmentally sound and sensitive manner; and (8) maintain the spacious open character of Farragut as it grows.

Some methods that are available for Farragut to utilize in the implementation of the Plan are identified in Chapter 7. The final chapter, Chapter 8, is a summary of overarching policies in the Plan.

The Plan was developed by an ad hoc citizens committee and presented for citizen comments at meetings of the Farragut Municipal Planning Commission and the Farragut Board of Mayor and Aldermen. It was approved by the Farragut Municipal Planning Commission on February 1, 2001, and adopted by the Farragut Board of Mayor and Aldermen on February 22, 2001.

CHAPTER 1

INTRODUCTION

PURPOSE OF PLAN

The purpose of this document is to provide Farragut, Tennessee, with a policy plan for the future development of land and transportation facilities. A Land Use and Transportation Policy Plan (Plan) is an essential planning instrument for a community with the primary purpose of producing an overall development plan and identifying strategies for implementing the plan. The objective of such a plan, as outlined in Section 13-4-203 of the *Tennessee Code Annotated*, is to serve as a guide for "accomplishing a coordinated, adjusted and harmonious development of the municipality which will, in accordance with existing and future needs, best promote public health, safety, order, convenience, prosperity, and general welfare as well as efficiency and economy in the process of development."

The Farragut Land Use and Transportation Policy Plan covers a planning period of approximately ten years, 2001-2011. The information presented in this plan should be used as a framework to guide local officials, community leaders, businessmen, and others as they make decisions that affect the future growth and development of Farragut. The plan is not intended to supersede the responsibility or authority of local officials and Town staff. Instead, it is designed to give the public and private sectors a basis to constructively use the interdependencies which exist between the various elements and organizations in the community. The development goals, objectives, and policies and the implementation strategies present in this plan should be periodically reviewed, and, when necessary, updated to reflect unanticipated occurrences or trends.

SCOPE OF PLAN

This Land Use and Transportation Policy Plan is designed to formulate a coordinated, long-term development program for the Town of Farragut and its identified projected growth area. The preparation of a development program requires gathering and analyzing a vast array of information. The historic events, governmental structure, natural factors, and socio-economic characteristics of Farragut are studied to determine how these have affected and will affect land uses and transportation facilities.

Existing land uses and transportation facilities are analyzed to identify important characteristics, relationships, patterns, and trends. From these analyses, pertinent problems, needs, and issues relative to land use and transportation in Farragut are identified. An amalgamation of this information is utilized to produce the Development Plan (Chapter 6) and to update the Major Road Plan. The Development Plan identifies development goals and objectives and establishes policies for achieving them. Finally, plan implementation methods are outlined and discussed.

COMMUNITY GOALS, PROCESS, AND METHODOLOGIES

The development of community goals and objectives is a primary product of this Land Use and Transportation Policy Plan. Essential to the development of these goals and objectives is citizen participation. Citizen participation is necessary to identify local needs and problems perceived by the community at large. Several methodologies are available for obtaining citizen input. The methodologies utilized in this plan included study groups, presentations, and public workshop meetings.

CHAPTER 2

BACKGROUND FOR PLANNING

INTRODUCTION

To effectively plan for any community, gathering information concerning its background is necessary. The size and location of a community are important aspects of community development. Information on a municipality's early settlement and events affecting past development assists in planning for its future development. An understanding of the community's political history and governmental structure helps to reveal the atmosphere in which future planning will take place. Background data for the Town of Farragut is presented in this chapter.

Location and Size

The Town of Farragut is located in southwestern Knox County and encompasses approximately 10,361 acres or 16.2 square miles. It generally lies between Interstate 40 to the north and the Tennessee River (Fort Loudon Lake) to the south, and is bounded to the west by Loudon County. The Town is situated approximately fifteen miles west of downtown Knoxville; however, the two municipalities do share a corporate boundary at Lovell Road and Parkside Drive. Illustration 1 depicts the Town's regional setting. The area lying between Farragut and downtown Knoxville has experienced significant development over the past two decades and Knoxville has rapidly expanded westward into the area. Farragut's west Knox County location places it in close proximity to development areas and employment opportunities in Loudon County, Anderson County, Roane County, and Blount County. This regional location, coupled with the westward development trend within Knox County, has positioned Farragut as a prime location for both residential and commercial development.

Early Settlement

Settlement in the Farragut area dates to before the civil war. This early settlement was concentrated along Kingston Pike at Campbell Station, a roadhouse dating back to the early 1800's. The area's proximity to the Tennessee River and the railroad community of Concord contributed to its early development. However, the community remained largely agricultural until quite recently. During the 1970's the Farragut area began to experience more rapid development and urbanization. This was due in large part to its proximity to large employers in Oak Ridge and its location along major thoroughfares connecting the Knoxville Metropolitan area to Nashville and Chattanooga. Development activity and expanding employment opportunities in the surrounding region has also contributed to increased growth in the Farragut area. As development pressures in the area intensified, a number of residents became concerned about the future of their community. They began to explore the possibility of incorporation in order to obtain local planning authority. Their purpose was to

Illustration 1

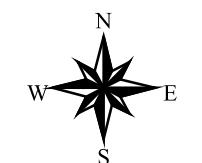
Location Map

Farragut, Tennessee



Legend

- Knoxville Metropolitan Statistical Area
- Surrounding Counties
- Town of Farragut
- Interstate Highways



7 0 7 Miles

Map Prepared By:
State of Tennessee,
Local Planning Assistance Office
Knoxville, Tennessee
Geographic Information Systems

Map Information provided by:
Town of Farragut

December, 2000
This is not an Engineering Map



ensure that Farragut would develop as a well-planned and aesthetically pleasing suburban community. As a result of these efforts, the Town of Farragut was incorporated in 1980.

GOVERNMENTAL STRUCTURE

Understanding the governmental structure of a municipality is an important aspect in planning for its future. A municipality's form of government, financial capability, and planning commission status directly affect its ability to plan for growth and development. The purpose of this section is to provide a general examination of the governmental structure of Farragut, to briefly describe its functions, and to assess its potential influence on future development.

Farragut is governed by a five-member Board of Mayor and Aldermen. The community was chartered under the *Tennessee Code Annotated* Section 6-1-101, General Law Mayor-Aldermanic municipal charter in 1980. The Town currently has thirty-three full-time employees and several part-time employees. Full-time employment positions within the local government include the Town Administrator and administrative office staff, the Town Recorder, Community Development staff, Engineering staff, Leisure Services staff, and Public Works staff. The majority of these positions are directly related to planning, community development activities and regulatory oversight, recreation and leisure services, and the maintenance of public facilities or infrastructure. Part-time positions include the Town Attorney and Town Judge, along with recreation program interns.

Municipal Planning Commission

The Farragut Municipal Planning Commission was created in 1980 in one of the first actions taken by the Board of Mayor and Alderman. The community's deep seated desire for a well planned suburban environment has made the planning commission an integral part of the Town's government since its incorporation. The initial purpose of the commission was to begin the land use planning process and to develop appropriate growth management controls. It was therefore charged with developing a land use plan, subdivision regulations, and a zoning ordinance for the municipality. The planning commission meets twice monthly and consists of nine members, including the mayor and one alderman. The Town employs a professional staff of planners and engineers in support of its community planning program. These professionals work directly with the planning commission, Town administration and elected officials, and the local development community. The Town also maintains a contract with the State's Local Planning Assistance Office for additional technical planning assistance.

SUMMARY OF FINDINGS

The Town of Farragut is located in southwestern Knox County, approximately fifteen miles west of downtown Knoxville. Its location places it close to development areas and employment opportunities in several surrounding counties. This regional location, coupled

with increased development pressure in west Knox County, has positioned Farragut as a prime location for both residential and commercial development.

Although settlement in the area predates the civil war, it was not until the 1970's that the community began to experience more rapid development and urbanization. This increase in development activity is primarily due to the community's location along major transportation routes and development activities in the surrounding region. The Town of Farragut was incorporated in 1980, largely in response to concerns over the impact of increasing development pressures in the community.

Farragut was chartered under Tennessee's, General Law Mayor-Aldermanic municipal charter provisions. The Town is governed by a five-member Board of Mayor and Alderman and currently employs a staff of thirty-three full-time employees. One of the first acts of the Town Board was the creation of the Farragut Municipal Planning Commission. Its purpose was to begin a land use planning program and to develop land use management controls. This program was rooted in the community's desire to see Farragut develop as a well planned and livable suburban community. Because of this, the planning commission has become an integral part of the Town's government.

CHAPTER 3

NATURAL FACTORS AFFECTING DEVELOPMENT

INTRODUCTION

The natural environment often influences the pattern of land use or development in a community. The climate, air and water quality, topography, drainage and flooding, and soils are significant natural environmental factors that will affect development. Ignoring these factors and their influence on land use development can prove to be extremely costly for individual property owners as well as to the entire community.

Not all land is equally suitable for development. Natural environmental factors, which cannot or should not be altered, must be considered in the land use development planning process. Decisions regarding the locations, types, and limits of various land uses should be responsive to natural environmental factors in order to protect the welfare of the general public. Future development decisions can avoid past mistakes through an increased knowledge and understanding of environmental factors and their relationship to the appropriate use of land.

The purpose of this chapter is to review and evaluate the natural environmental factors influencing the land use patterns in Farragut and its identified projected growth area.

CLIMATE

The Town of Farragut is located within the Tennessee River Valley in eastern Tennessee. The area's climate can be described as humid sub-tropical. This climate type is characterized by relatively mild winters and warm summers. Although the area is located well inland, it lies in the path of cold air moving southward from Canada and warm moist air currents moving northward from the Gulf of Mexico. These alternating currents frequently bring sharp daily weather changes and are responsible for significant seasonal variations.

Yearly rainfall amounts in the area are normally abundant. The 35-year mean annual rainfall is 46.3 inches, as reported for the Tennessee River Basin by the United States Weather Bureau. Precipitation is generally lightest in late summer and early fall, as a result of high pressure weather systems, and is heaviest in late winter and early spring when low pressure systems frequently move through the area. Thus, periods of drought are offset by periods of ample to excessive precipitation throughout the year. The area is subject to locally heavy storms in which as much as five inches of rain may fall during a very short period of time. These intense storms can lead to flooding problems. Within Farragut, moderate flooding primarily occurs along the floodplains associated with Turkey Creek and Little Turkey Creek. Fortunately, much of this floodplain area has remained undeveloped and there are no large-scale structural flooding problems in the Town.

The mean annual high and low temperatures for the area are reported as 68.9 degrees and 46.3 degrees Fahrenheit. Extremes in temperature are uncommon, seldom rising above 100 degrees Fahrenheit or falling below -5 degrees Fahrenheit. Average daily relative humidity is approximately 70 percent, with the highest values generally occurring in winter. The first fall freeze usually comes in late October and the last spring freeze is usually in early April. Although winters are not severe (the ground seldom freezes below four inches) they are often wet and outside work may be hampered around construction sites.

AIR QUALITY AND WATER RESOURCES

The air quality in and around Farragut is considered relatively good. The Town and surrounding area are located within a region that is currently in compliance with national ambient air quality standards. However, the Tennessee Department of Environment and Conservation reports that the Knox County region will likely become a non-attainment area for ozone and very fine particulate matter under new national standards that will take effect over the next several years. Farragut's abundant open space and lack of highly urbanized areas has helped to maintain air quality in the Town. As development pressures continue to increase, the community will need to work cooperatively within the region to ensure that air quality standards can be maintained. These issues will most certainly have an impact on the land use planning and development process within the area.

The primary potable water source for the Town of Farragut is Fort Loudon Lake, via the First Utility District of Knox County. Water quality in the Town is generally considered excellent. The First Utility District also provides wastewater collection and treatment services in the Farragut area. The District has a National Pollutant Discharge Elimination System permit for discharging its treated wastewater into Turkey Creek at Fort Loudon reservoir. According to the latest information provided by the Tennessee Department of Environment and Conservation, First Utility District and the Town of Farragut are under no moratoriums due to water and wastewater treatment problems.

TOPOGRAPHY

Topography is defined as the general configuration of the earth's surface, including its slope, geological characteristics, and other natural features. Farragut is located in the Ridge and Valley physiographic province of eastern Tennessee. This province is located between the Blue Ridge Mountains to the east and the Cumberland Mountains to the west. The underlying rock strata consist primarily of dolomite with interbeds of limestone and magnesian limestone. This stratum is roughly 3,000 feet thick and has been folded by geologic processes. The folded nature of the strata, coupled with erosion and weathering, results in the area's characteristic parallel ridges and valleys. Topography in the Town is generally rolling, with low hills, gently sloping surfaces, and well defined drainage areas. Areas of steeper slopes however, do exist and must be considered in the land use planning

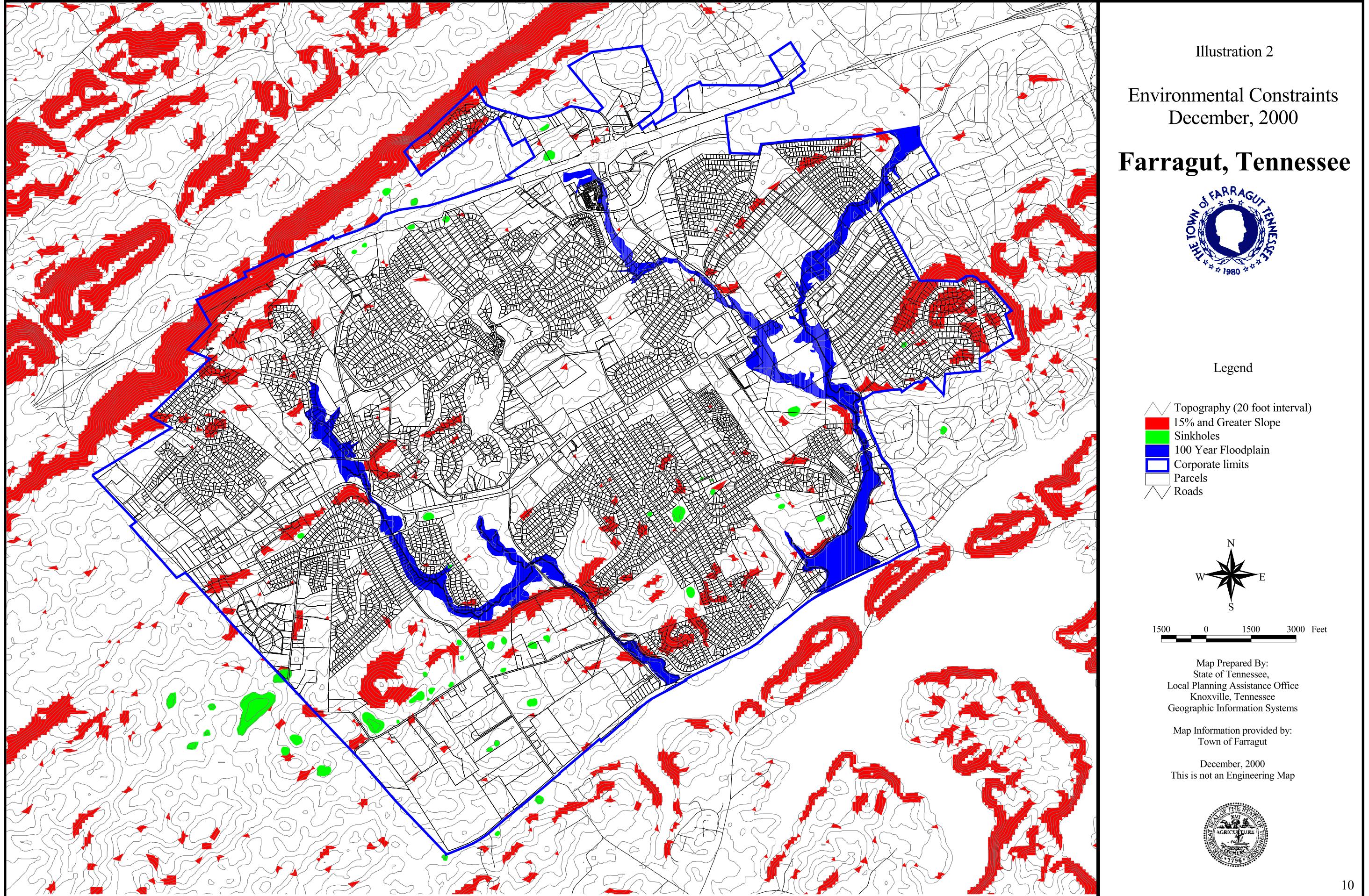
and development process. Illustration 2 depicts area topography and slopes that exceed fifteen percent. Elevations in the area commonly range from 810 to approximately 1,200 feet above mean sea level. The elevation at Farragut Town Hall is 900 feet, while Black Oak Ridge, which runs parallel to I-40/75 to the northwest, has an elevation of approximately 1,200 feet. Much of the community slopes gently downward toward the drainage ways of Turkey Creek and Little Turkey Creek.

DRAINAGE

The drainage pattern for Farragut and its growth area is well defined. The community is drained almost entirely by Turkey Creek and Little Turkey Creek, and is divided into four primary drainage areas. Both creeks generally have narrow streambeds with wide floodplains, and flow southward to join the Tennessee River at Fort Loudon Lake.

Farragut has been a participant in the National Flood Insurance Program for several years. This program is organized under the Federal Emergency Management Agency (FEMA). It identifies potential flood hazard areas within the community, requires a community to adopt floodplain management regulations, and provides residents with the opportunity to purchase flood insurance. The 100-year floodplains associated with Turkey Creek and Little Turkey Creek include an area of approximately 500 acres, as defined by FEMA. Permanent water features occupy approximately 100 acres of this defined floodplain area. These floodplains are shown on Illustration 2. Several wetland areas have also been identified along Turkey Creek. The development potential of land affected by flooding and/or wetlands is significantly impacted and should be avoided where possible.

Several areas within the Town exhibit characteristics of karst geology, as identified by the United States Geological Survey (USGS) and Town staff. This is particularly true in the southwestern portion of the community. These areas are identified by the presence of a large number of sinkholes, particularly to the west of Virtue Road and south of Old Stage Road and along Black Oak Ridge. Illustration 2 identifies a number of sinkholes located within the Town. Areas affected by karst geology are drained internally through underground channels formed in limestone and other soluble geologic formations. These areas should not be developed without the provision of public sewer, and particular care is required to avoid damaging their sensitive natural surface and subsurface drainage systems. Sinkholes shown on the USGS Concord quadrangle map account for approximately thirty acres, however the location and number of unmapped sinkholes and other karst related drainage problems includes a much larger area. There are also areas of poorly drained soil in Farragut that present an impediment to development, especially without the provision of sanitary sewer.



SOILS

One of the most important factors affecting development in any community is the composition and capability of the area's soils. Understanding the characteristics of local soils is important in determining various development limitations and the appropriate land use for any particular site. Soil characteristics effecting development potential include such things as permeability and drainage qualities, depth to water table, flood potential, soil depth and depth to bedrock, load bearing strength and stability, and shrink or swell potential.

Generally speaking, soil conditions found across large parts of the Farragut area do not severely limit overall development potential. However, specific limitations do exist and must be considered on a site by site basis. Soil types and characteristics vary considerably across the landscape. A site specific evaluation is vital because each potential development area may contain many different soils. Farragut area soils fall into one of five separate soil associations, as defined and mapped by the USGS in 1972. These associations are simply groupings of many separate soil types which tend to be found together. The Farragut area contains approximately eighty-four separate soil types or slope phases of those types, as defined and mapped by the United States Soil Conservation Service, Soil Survey of Knox County, TN. Each of these soils has individual characteristics that may effect its suitability for various land use development applications.

The soil characteristics that have had the greatest impact on development in Farragut are related to structural properties, flooding, or poor drainage. Many area soils have a high clay content, particularly in the subsoil layers. This affects strength and stability, limiting their ability to support roadways and other large construction projects. Steeper slopes compound these structural limitations. Depth to bedrock and poor soil texture can also place limitations on roadway and other construction projects. This is particularly true of local soil types underlain by shale and located on steeper slopes. Detailed site evaluation, engineering, and planning is required to avoid or mitigate poor structural soil conditions. Soils associated with flooding, poor drainage, and wetlands also limit development potential in some areas of the Town and should be avoided. These soils tend to be found along streams, within sinkhole areas, and in other poorly drained areas. Certain local soils also present limitations for septic tank use due to permeability problems. Fortunately, the majority of the Town has access to sanitary sewer service and development with septic tanks is rare.

SUMMARY OF FINDINGS

Generally speaking, land use development is not widely constrained by environmental factors in the Farragut area. However, specific environmental limitations do exist and must be accounted for in the land use planning and development process. The Town of Farragut is located within the Tennessee River Valley in eastern Tennessee. The area's climate is moderate and imposes only limited or seasonal constraints on development. Air and water quality in the Town are considered good to excellent. However, the Tennessee Department of Environment and Conservation reports that the Knox County region will likely become a non-attainment area for certain air pollutants under new national standards.

This potential air quality problem is regional in nature, and will require regional cooperation for solutions. Assuming that future developments and businesses comply with all revised federal pollutant emission guidelines, there should be no significant impediments to growth within the Town.

The topography in the area is predominately gently rolling and conducive to many land use applications. Areas of steeper topography, however, do exist and must be considered in the development process. Some wetlands and flooding problems exist along Turkey Creek and Little Turkey Creek, which drain virtually the entire Town. There are also drainage and structural problems associated with sinkholes and other karst features in the area. This is particularly true in the southwestern portions of Farragut. The development potential of land affected by flooding, wetlands, and karst is significantly constrained and these areas should be reserved for low intensity land use applications where possible.

Soil conditions found across much the Town generally do not impose significant developmental constraints. However, like so many other environmental factors, specific limitations do exist and must be understood. Soil types and characteristics are highly variable and require a site-by-site evaluation. The soil conditions of greatest concern in the area are related to structural properties such as strength and stability, flooding, and poor drainage. Particular attention should be paid to soil conditions located on steeper slopes, along streams and drainage ways, around sinkholes, and in poorly drained or wet areas.

CHAPTER 4

SOCIO-ECONOMIC FACTORS AFFECTING DEVELOPMENT

INTRODUCTION

This chapter will present a brief summary of population and employment trends pertinent to the preparation of a land use plan for Farragut. Past changes in population and employment, as well as population projections through 2020, will be examined for their implications on development within the Town. A basic understanding of this information is vital to the overall planning effort. The formulation of community development strategies, the identification of land use needs, and the discussion of various land use issues that take place during the planning process must reflect these trends and projections if the land use plan is to be relevant.

POPULATION

The Town of Farragut has experienced significant population growth since its incorporation in 1980. Table 1 indicates that the Town's population increased from 6,279 residents in 1980 to 16,654 as counted in a 1997 special census. This represents a 165 percent increase, or 10,375 additional residents. During that same period, the University of Tennessee (UT) Center for Business and Economic Research estimates that the population of Knox County as a whole increased by approximately 45,932, or 14.4 percent, to a total of 365,626 persons. Population growth trends for Knox County and Farragut are depicted on Graphs 1 and 2.

Table 2 provides area population projections made by the UT Center for Business and Economic Research for the years 2000 through 2020. The Center projects that Knox County's total population will increase from 374,616 residents in the year 2000 to 432,866 in the year 2020. This represents an increase of 18.4 percent over the twenty year period. During that same period, the Center projects that Farragut will grow by 4,738 residents, to a total population of 21,853. This reflects a growth rate of 27.7 percent, which is substantially less than the rate experienced during the preceding twenty-year period. In actual numbers, the Center is projecting that the Town's population growth over the next twenty years (4,738 persons) will be half that of the preceding twenty years (10,375 persons). These projections are depicted in Graphs 3 and 4. The Town of Farragut has population growth expectations that exceed the UT projections. These expectations are based on growth and development trends experienced in West Knox County, East Loudon County, and Blount County over the past decade.

A special census conducted for Farragut in 1997 reported that the Town's 16,654 residents occupied 5,763 dwelling units. This equates to an average occupancy density of 2.89 persons per household. The land use inventory discussed in Chapter 5 indicates that the number of dwelling units has since increased to a total of 6,804. If the average number of

TABLE 1
POPULATION IN SELECTED TENNESSEE AREAS
1960 TO 1998

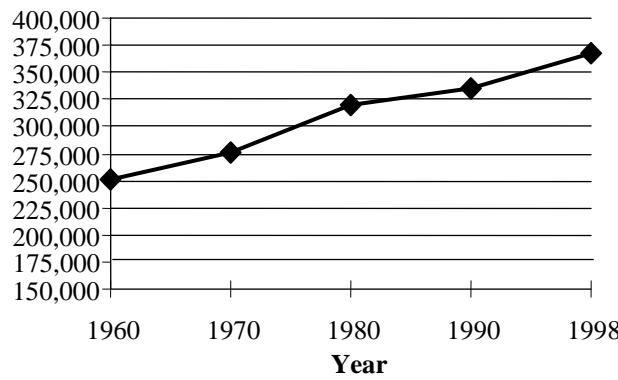
Area	1960	Percent Change 1960-70	1970	Percent Change 1970-80	1980	Percent Change 1980-90	1990	Percent Change 1990-1998	Most Recent (1998)
Farragut	---	---	---	---	6,279	103.9	12,802	30.1	16,654
Knoxville	111,827	56.1	174,587	0.3	175,045	-3.0	169,761	-1.1	167,854
Knox Co.	250,523	10.3	276,293	15.7	319,694	5.3	336,610	8.6	365,626
ETDD ¹	654,236	7.1	700,985	20.6	845,121	5.6	892,748	10.9	990,014
Tennessee	3,567,089	10.1	3,926,018	16.9	4,591,120	6.5	4,890,525	9.8	5,368,198

¹ ETDD, East Tennessee Development District

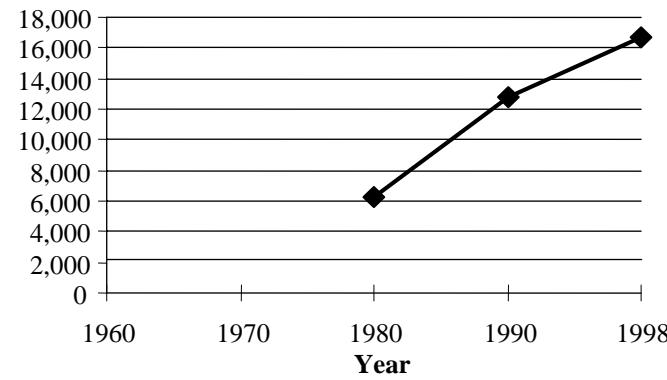
Source: Tennessee Statistical Abstract, 2000 edition, UT Center for Business and Economic Research, Town of Farragut Special Census, and U.S. Census of Population.

Note: Population is as counted in each Decennial Census year. No provision has been made for comparable land areas. Growth by annexation and new incorporation is reflected in the data.

Graph 1
Knox County Population
1960 to 1998



Graph 2
Farragut Population
1980 to 1998



Source: Tennessee Statistical Abstract, 2000 edition, UT Center for Business and Economic Research, Town of Farragut Special Census, and U.S. Census of Population.

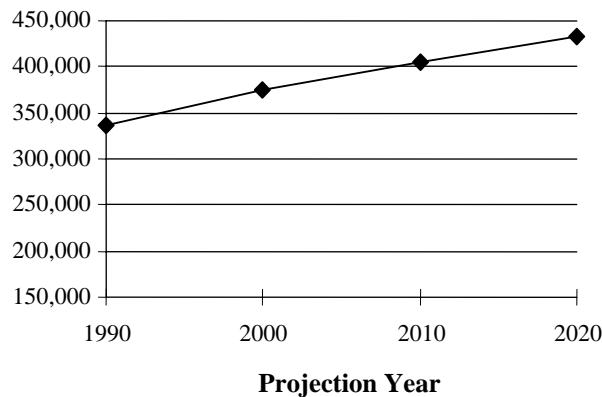
TABLE 2
POPULATION PROJECTIONS FOR SELECTED TENNESSEE AREAS
2000 TO 2020

Area	1990	Percent Change 1990-2000	2000	Percent Change 2000-2010	2010	Percent Change 2010-2020	2020
Farragut	12,802	33.7	17,115	13.5	19,434	12.4	21,853
Knoxville	169,761	0.6	170,787	8.0	184,487	7.0	197,343
Knox Co.	336,610	11.3	374,616	8.0	404,666	7.0	432,866
ETDD ¹	892,748	14.0	1,018,004	9.1	1,110,246	7.9	1,197,500
Tennessee	4,890,525	13.2	5,533,762	9.6	6,062,695	8.8	6,593,194

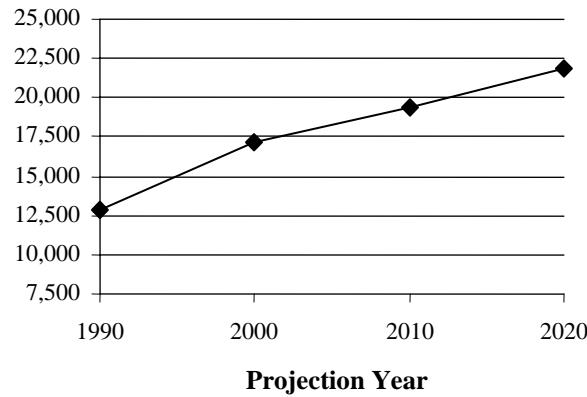
¹ ETDD, East Tennessee Development District

Source: UT Center for Business and Economic Research

Graph 3
Knox County Population
Projections to 2020



Graph 4
Farragut Population
Projections to 2020



Source: UT Center for Business and Economic Research.

persons per household has remained relatively constant for these additional units, the Town's current population can be estimated at 19,663 residents. This estimated population is actually 229 persons greater than the Center's projected population for 2010. Assuming these figures are accurate, the Town may have experienced a population growth rate of 53.6 percent for the ten year period between 1990 and 2000.

Extrapolating from the current estimated population of 19,663 persons, if the 1990 to 2000 estimated growth rate is sustained through 2010, Farragut's total population would rise to 30,202 persons residing in 10,450 dwelling units. If this growth rate is sustained through 2020 the Town's population would rise to 46,390 persons, living in 16,051 residential dwelling units.

It is of course, difficult to accurately predict growth rates for any municipality over a 20 year period, and virtually impossible to state with certainty that current growth rates will continue. The difference between the population projections provided by the University of Tennessee and the above noted estimates based on current growth rates illustrates the uncertainty in projections, and explains why it is difficult to plan for the Town's future. In spite of this uncertainty, it is clear that Farragut will continue to grow for the immediate future, and that the Town, the County, and the area's utility districts must provide adequate levels of service to support that growth.

EMPLOYMENT

For the purposes of this analysis employment information and trends are primarily discussed for the surrounding Knoxville Metropolitan Statistical Area (MSA) and Knox County as a whole, as depicted on Illustration 1. Farragut is a bedroom community within the Knoxville MSA. The Town's existing commercial areas are generally focused towards providing services and retail products to the immediate community and employ only a limited number of residents. As a bedroom community, the Town's overall employment base is directly related to employment trends and opportunities in the surrounding MSA area. In 1990, only 5.7 percent of Farragut's employed residents reported that they worked within the Town, while 94.3 percent commuted to the surrounding area. The vast majority, 93 percent, of those commuters reported that they were employed within the Knoxville MSA.

Employment opportunities and trends within the Knoxville MSA have changed considerably during the past twenty years. Overall employment in the nonagricultural sectors of the economy increased from 197,300 jobs in 1980 to 321,933 in 1999, or 63.2 percent. However, this growth has not been evenly distributed across all employment sectors. There has been a general decline in manufacturing employment, while all other sectors have seen considerable growth. This is particularly true in the trade and services sectors, which have experienced the area's highest growth rates. Between 1980 and 1999, the number of persons employed in manufacturing declined from 52,600 to 46,867, a decrease of 10.9 percent. At the same time, employment in the retail trade sector increased by 109 percent, employment in the finance, insurance, and real estate services sector increased by 83 percent, and employment in the general services sector increased by 180

percent. In real numbers, employment in these three sectors rose by 45,017 persons, 6,683 persons, and 56,306 persons, respectively. There has also been strong job growth in the construction/mining sector and the transportation, communication, and utilities sector. This is most likely attributable to overall growth and development in the area.

Comparing employment trends between the Knoxville MSA and the State as a whole provides important insights. In general, the State's labor force is more evenly distributed between employment sectors than in the Knoxville area. In 1999, manufacturing in the Knoxville MSA represented just under 15 percent of the area's labor force, while the State average for manufacturing employment was close to 20 percent. At the same time, trade and services within the MSA represented 58.6 percent of the regions total employment, versus 55.2 percent for the State as a whole. When compared to statewide figures, the Knoxville MSA has a much heavier reliance on retail trade and personal or business services for employment than the State as a whole. This reflects the general shift away from a manufacturing economy and the move towards trade and services that many other growing urban and suburban areas around the country are experiencing.

SUMMARY OF FINDINGS

Farragut has experienced rapid population growth since its incorporation in 1980. A 1997 census found the Town's population had grown to 16,654 persons, an increase of 165 percent over the 1980 population of 6,279 persons. The UT Center for Business and Economic Research has projected that the community's population will grow at a much lower rate over the next twenty years. However, recent development trends in Farragut and the surrounding area indicate that these UT projections may significantly underestimate future population. In fact, the Town's current population has been estimated at 19,663 residents. This figure is based on residential development since the 1997 special census, and if correct, would approximate the UT projected population for 2010. Assuming that these recent growth trends continue unabated, the Town's population could increase to 46,390 residents in 2020. It is, of course, difficult to accurately predict growth rates and population increases over any twenty year period.

Farragut is also a bedroom community, meaning that most of its residents commute to other areas for work. The Town's existing commercial areas are focused on serving the day-to-day needs of the immediate area and employ only a limited number of people. In 1990, only 5.7 percent of the local labor force actually worked within the Town. The remaining 94.3 percent commuted to the surrounding Knoxville Metropolitan area for work. As a bedroom community, the Town's overall economic health and employment base is directly related to trends and opportunities in the surrounding area. Fortunately, employment opportunities in the surrounding Knoxville Metropolitan Area have increased considerably over the past twenty years. This economic and employment growth has most certainly fueled the population increases experienced by Farragut during the same period. The area's employment growth has not been evenly distributed across all employment sectors. There has been a general decline in manufacturing employment, while the trade and services employment sectors have experienced large increases. This reflects the general shift away

from a manufacturing economy and the move towards trade and services that many other growing urban and suburban areas around the country are experiencing.

CHAPTER 5

EXISTING LAND USE AND TRANSPORTATION ANALYSIS

INTRODUCTION

A survey and analysis of existing land use patterns and characteristics is a prerequisite to preparing a future land use and transportation policy plan. The data from this existing conditions analysis, when integrated with pertinent information concerning natural environmental factors, population and employment trends, and existing transportation facilities, is vital to creating appropriate development policies and determining those areas best suited for various land uses and transportation facilities over the planning period.

EXISTING LAND USE

This inventory identifies and analyzes various land uses by category and the amount of land devoted to each. It is intended to provide information about existing development trends so that future land use needs can be determined. The existing land use pattern within the Town of Farragut is depicted on Illustration 3. This land use information was collected by the Local Planning Office staff through early December 2000. For the purposes of this analysis local land uses have been grouped into the following categories:

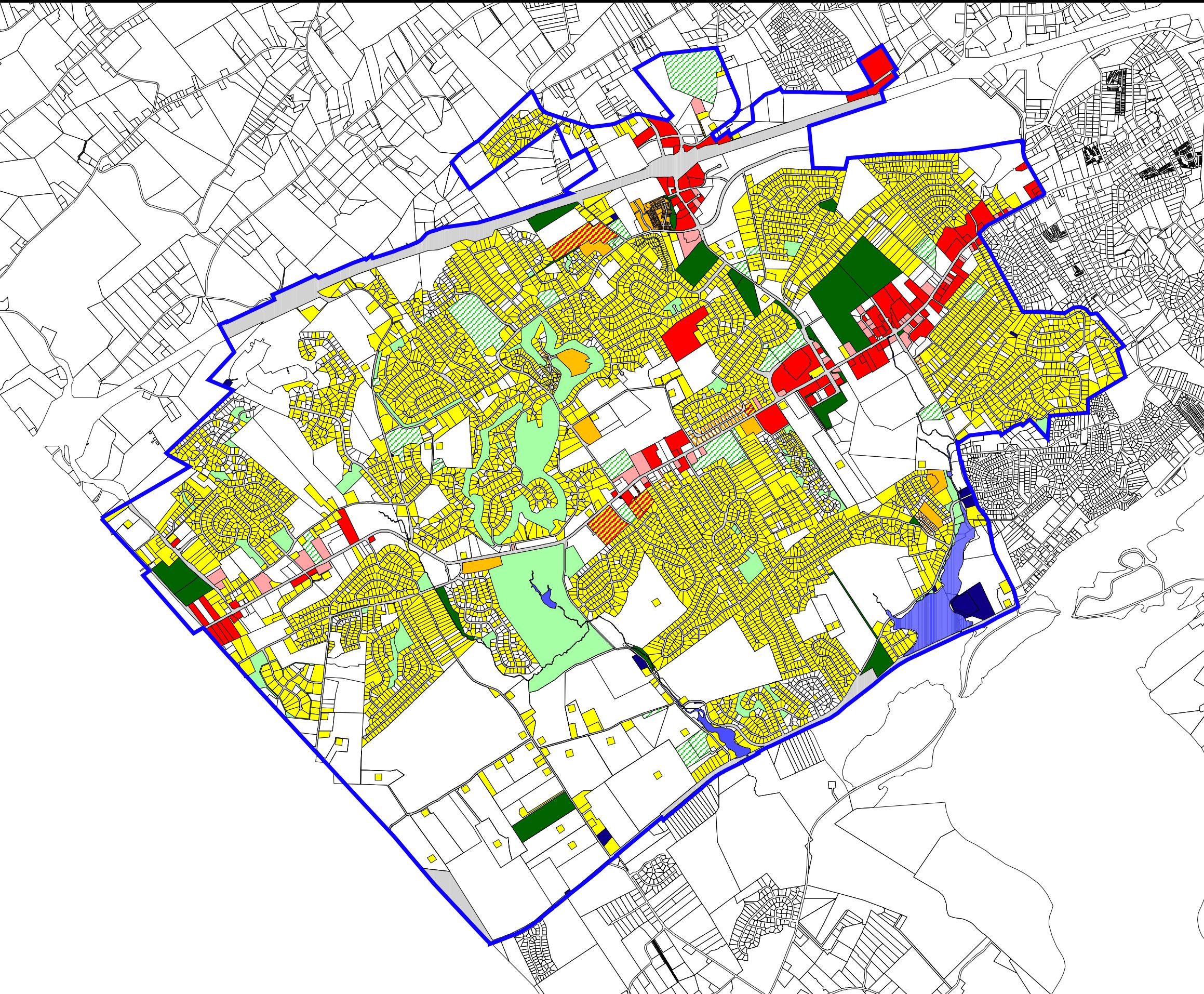
Residential: Land on which one or more dwelling units are located. This includes all single-family residences, multi-family residences, and mobile homes. For the purposes of this study single family residences located on tracts of five acres or more were allocated one residential acre per unit in this category. The remaining acreage was considered undeveloped and combined with vacant land under the assumption that it may be available for future development.

Commercial/Private Services: Land on which retail trade activities and/or services occur. This category includes uses such as retail stores, banks, professional offices, personal and business services, repair services, etc.

Recreational, Cultural, Educational, and Other Public Uses: Land on which educational facilities and all federal, state, and local governmental uses are located. Land on which museums, libraries, parks, churches, and similar institutional uses are located.

Utilities: Land on which utility related structures or facilities are located. This includes water tanks, sewer plants and pump stations, electrical substations, and telephone switching stations. It does not include all lands containing or encumbered by utility service lines.

Transportation: Land on which municipal streets and state highways are located, including the rights-of-way.



Vacant Land: Land that either has not been or cannot be developed. This includes agricultural land and undeveloped portions of large single family residential tracts (see definition of residential land above). Vacant land can be divided into two general categories:

1. Vacant Unimproved. Land that does not have adequate access to existing infrastructure, and will require public improvements before development. This includes idle or agricultural lands that lack the infrastructure necessary to support development.
2. Vacant Improved. Land that has direct access to existing street and utility infrastructure, and can be developed without further public improvements being required. A vacant lot in an existing subdivision is an example of this land category.

LAND USE ANALYSIS

The corporate limits of Farragut encompass an area of approximately 10,361 acres, or 16.2 square miles. An estimated 59.1 percent or 6,118 acres of this total area has been developed. Existing land use information for the Town is provided in Table 3 and is discussed in greater detail below. Residential land use comprises approximately 3,630 acres, or 59 percent of all developed land within the Town. Single family detached housing units occupy approximately 3,477 acres of all residential land. Duplexes, condominiums, and apartment developments occupy an additional 152.7 acres. The Town's transportation system, including all rights-of-way, occupies approximately 1,091 acres, or 17.8 percent of the total developed land base. Commercial developments account for another 396.8 acres, or 6.5 percent of the developed area. The remaining developed land is allocated to recreational/cultural/educational/and other public services, which occupy approximately 965 acres and utilities that occupy 34 acres. Graph 5 depicts the percentage of developed land dedicated to each land use category.

Vacant land constitutes approximately 39.9 percent or 4,136 acres of the Town's total incorporated area. Of this, roughly one third can be classified as improved vacant land with access to existing public water, sewer, and streets. The remaining vacant land does not currently have adequate access to existing infrastructure and has been classified unimproved vacant land. Portions of this vacant land base are restricted by environmental limitations and reserved buffer areas. Graph 6 depicts the percentages of all land use categories within the Town. A detailed analysis of each category follows.

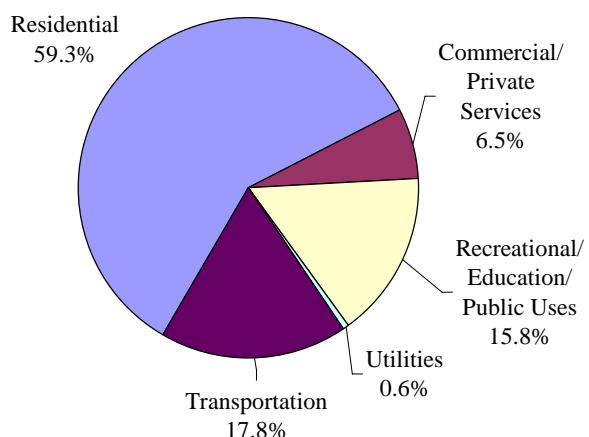
Residential

Residential land uses occupy the largest portion of the developed land area in Farragut, which is typical of most communities. Within this category the traditional single-family dwelling is by far the predominant form of development. In fact, detached single-family development accounts for approximately 95.8 percent of all defined residential land in

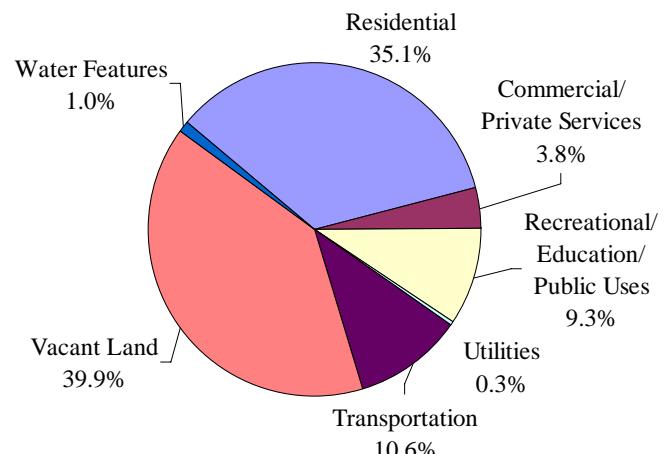
Table 3
Existing Land Use
December 2000

Land Use Category	Total Area in Acres	Percentage of Total Area	Percentage of Developed Land Area	Total Number of Units
Residential				
Single Family	3477.8	33.6	56.8	5935
Duplex	26.0	0.3	0.4	96
Townhome/Condo	74.7	0.7	1.2	403
Apartment	52.0	0.5	0.9	370
Total	3630.5	35.1	59.3	6804
Commercial/Private Services				
Commerical	319.4	3.0	5.2	251
Office	77.4	0.8	1.3	66
Total	396.8	3.8	6.5	317
Recreational/Cultural/Educational/Other Public Uses				
Public	251.9	2.4	4.1	
Semi-Public	228.6	2.2	3.8	
Private Recreation	485.0	4.7	7.9	
Total	965.5	9.3	15.8	
Utilities	34.1	0.3	0.6	
Transportation Rights-of-Way	1091.3	10.6	17.8	
Total Developed Land	6118.2	59.1	100.0	
Vacant Land	4136.9	39.9		
Water Features	106.5	1.0		
Total Area	10361.6	100.0		

Graph 5
Percentage of Developed Land Area in Corporate Limits



Graph 6
Percentage of Total Land Area in Corporate Limits



Farragut. The remaining residentially classified land is occupied by three major apartment complexes and one small apartment building, forty-eight duplex structures containing ninety-six attached units, and nine multi-dwelling unit townhouse or condominium developments.

Most of the residential growth and development in Farragut has involved the creation of traditional subdivisions. These subdivisions have been developing over time in areas adjacent to Kingston Pike, Campbell Station Road, Concord Road, Everett Road, Grisby Chapel Road, Old Stage Road, Turkey Creek Road, Union Road, and Watt Road. The availability of adequate transportation and utility infrastructure has had the greatest impact on the location and development of these subdivisions. Natural environmental factors, particularly flood hazards and topography, have also influenced subdivision location and development. Many of the Town's subdivisions are not internally connected to adjoining subdivisions with public streets. They must instead be accessed directly from the arterial and collector street network. This access pattern increases congestion on these larger streets because local traffic cannot move internally between subdivisions.

Commercial and Private Services

Commercial developments occupy approximately 396 acres, or 6.5 percent of the Town's developed land base. This includes all sites containing retail, office, and service establishments. There are currently two major and two minor clusters of concentrated commercial development in Farragut.

The first major commercial concentration is the general commercial area located along Kingston Pike between Lovell Road and the Village Green Shopping Center. This area can be viewed as the "Town Center", and has long been a focal point for general commerce and private services in Farragut. It includes five major retail/service developments with additional strip centers located between them. Commercial activities in this area include banks, grocery stores, drug stores, department stores, restaurants, office complexes, and other miscellaneous shops. The area also includes the Farragut Town Hall, along with several churches. The regional commercial area located along N. Campbell Station Road, from Grigsby Chapel road to just north of the I-40 interchange is the second major commercial concentration in Town. This regional commercial area is focused towards meeting the needs of interstate travelers. Auto service and convenience centers, restaurants, and lodgings are the dominant commercial activities in the area.

The Town's two minor commercial clusters are located along Kingston Pike, west of the Town Center area. The first of these lies between Boring Road and Smith Road, while the second is found in the Dixie Lee Junction area. These minor clusters are characterized by general commercial and office developments.

The area in Farragut with the greatest potential for future commercial growth is located along Kingston Pike east of the Dixie Lee Junction. This area is well served by utility and transportation infrastructure and contains ample vacant properties. Secondary areas along Parkside Drive and north of the I-40 interchange also have potential for future commercial development. These areas are located adjacent to the existing regional

commercial cluster. However, development potential in the area north of I-40 is currently limited by inadequate transportation infrastructure. Future road improvements in this area could open substantial properties for regional commercial or office development.

Recreational, Cultural, Educational, and Other Public Uses

Three primary land use groupings make up this larger category. Group 1 consists of public recreation areas and government buildings or facilities. It includes the Town Hall and public works facility, four Knox County schools, and the Knox County Library. Lands associated with the Town's three existing parks and one proposed park are also included in this group, as is the Town's public greenway system. Group 2 consists of all private recreational facilities and lands. It includes all recreational facilities and open space areas located within individual subdivisions, along with the two golf courses located in Town. Finally, Group 3 includes religious, institutional, and semi-public land uses. Religious facilities and cemeteries dominate this land use group.

Recreational, Cultural, Public, and Semi-Public land uses in Farragut occupy 965.5 acres, which represents approximately 15.8 percent of the developed land base, or 9.3 percent of the Town's total area. The availability of public parks and facilities, open space, and other recreational areas is a priority in Farragut. In fact, the public land and private recreational land components of this category alone account for approximately 12 percent of the Town's total developed land area. The large amounts of open space and recreation areas associated with this category contribute to the character, beauty, and livability of the community.

Utilities and Public Services

The availability of utilities and other public services is critically important to future growth and development in the community. The residents of Farragut have a range of urban services available to them. These services are provided either directly by the Town, or by other local service providers. Currently, the Town provides services in the areas of streets and public works, recreation and leisure activities, planning, land use controls and building codes, and general municipal code enforcement. Rural/Metro Corporation provides fire protection and ambulance services on a contractual basis with individual property owners. Solid waste collection is also available to residents on a private contractual basis. The First Utility District provides both water and sewer services. The Lenoir City Utilities Board and the Knoxville Utility Board provide electrical service and natural gas in the area, respectively.

The First Utility District provides both water and sewer services across the southwestern portion of Knox County, including the entire Town of Farragut. Public water is generally available throughout the Town, with only a small number of properties not having direct access. Fire hydrant coverage is excellent in the built up areas of Town. First Utility District reports that its current water treatment system can support anticipated regional water demands through 2014, and that planned system expansions will support projected growth for the next 20 years.

Sanitary sewer service is available within most of the built up portions of Farragut. The First Utility District reports that its 15 million gallon per day sewage treatment facility is operating at approximately 57 percent of total capacity, and that it should be able to accommodate projected future demands. Sewer services are largely absent west of Virtue Road in the Town's southwestern quadrant. The utility reports however, that recent sewer system improvements in the Choto basin area are designed to support up to 5,000 additional customers over the next ten years. This increased service capacity should be adequate to support potential development in this portion of Town during the planning period.

Vacant Land

As noted, approximately 39.9 percent, or 4,136 acres of the Town's total incorporated area are currently classified as vacant. This large vacant land base is significant and will be needed to accommodate the Town's projected population growth. However, not all of this vacant land is equally capable of supporting higher density urban development.

The land use inventory utilized for this analysis identified approximately 560 acres of vacant land as being subject to physical constraints. These constraints limit development potential and include floodplains, slopes in excess of 15 percent, and features related to karst geology (see Illustration 2). This land should only be considered suitable for non-urban, lower density developments and/or open space. An additional 41 acres was identified as unavailable for development because it had been reserved and zoned for buffer areas. Subtracting these constrained and restricted lands from the total vacant land base leaves approximately 3,535 acres for future higher density development. Of this, roughly one third can be classified as improved vacant land with access to existing public water, sewer, and streets. Much of this improved land is located in or around existing subdivisions and is immediately available for development. The remaining unconstrained vacant land base does not currently have adequate access to existing infrastructure and is classified as unimproved vacant land. Development of this unimproved land will require additional public infrastructure construction and service improvements.

The majority of vacant land in Farragut is physically suitable for higher density development and it can be assumed that infrastructure improvements will occur as development demand increases. The sheer amount of this vacant land, 3,535 acres, provides the potential for significant future growth. To illustrate this point, we can assume that existing development trends will continue and the Town's remaining vacant land will fully develop over time. Residential development currently occupies approximately 59 percent of all developed lands. We therefore assume that this development pattern will continue into the future and that at least 59 percent of the remaining lands in Farragut will be utilized for residential purposes. Single family (detached) development currently accounts for approximately 95.8 percent of residential land, or 56.8 percent of all developed land. The overall development density in this category is approximately 1.7 units per acre, however this figure has often exceeded three units per acre in the more recent subdivisions.

The trend towards higher densities is expected to continue due to increasing development pressure and land costs. Assuming therefore that 56.8 percent of all physically

suitable vacant land was developed at an average density of three units per acre, the Town could reasonably expect an additional 6,023 single family residential units to be developed. At 2.89 persons per household, this unit growth would correspond to 17,406 additional residents. It can also be assumed that the demand for higher density multi-family developments will increase as land becomes more scarce and costs increase. Condominiums, townhomes, and apartment complex developments currently account for approximately two percent of the Town's developed area and have been developing at average densities of between five and seven units per acre. If only two percent of the remaining available vacant land was developed at these densities the Town could expect an additional 353 to 494 multi-family dwelling units. At 2.89 persons per household, this would yield an additional 1,020 to 1,427 residents, respectively.

TRANSPORTATION ANALYSIS

A municipality's transportation system provides a vital service function that is essential for growth and development. It forms the framework upon which a community is built. A well-planned and maintained transportation system ensures adequate access and traffic circulation, which are prerequisites for economic activity and general community development.

Streets and highways typically occupy a significant percentage of the developed land area in a community. Within Farragut, there are approximately 1,091 acres of land currently devoted to streets, roadways, and other rights-of-way. This represents 10.6 percent of the Town's total area, and 17.8 percent of all developed lands. All local streets, state and federal highways, and railroad rights-of-way within Farragut are included in this land use category.

There are considerable design, purpose, and utilization differences between the various thoroughfares that traverse Farragut and its potential growth area. To better understand and analyze the overall system, these local thoroughfares have been classified by their intended use. This review of the Farragut transportation system also includes a description of the area's general traffic circulation pattern, major traffic generators, impediments to traffic flow, mass transit, pedestrian/non-vehicular circulation, and air/rail/port facilities.

Thoroughfare Classification

As noted, there are different functions that a thoroughfare may serve in a community's transportation system. The primary or intended use of a roadway may vary from providing direct access to residential properties, to providing for the uninterrupted movement of high speed traffic. A functional classification has been adopted to clarify

thoroughfare type and usage. This classification scheme corresponds with the Farragut Major Road Plan, and is depicted on Illustration 4. It includes the following thoroughfare classifications: (1) interstate highways, (2) major arterial streets, (3) minor arterial streets, (4) major collector streets, (5) local collector streets, and (6) local/minor streets. These roadway types are defined as follows:

Interstate Highway: Access controlled roadways connecting major population centers. They are devoted to serving high traffic volumes and long distance trips. The only such highway in Farragut is Interstate 40/75, which passes through the northern portion of Town.

Major Arterials: Roadways that link population centers, but often lack controlled access and traffic flow separation. Usually these are numbered U.S. or state highways. Highway 332 (Concord Road) and Campbell Station Road which run north-south, and Highway 70/11 (Kingston Pike) which runs east-west can be defined as major arterials. Watt Road and Parkside Drive also fall within this classification.

Minor Arterials: Roadways that link small population nodes and provide direct access to major traffic generators such as employment and shopping centers. Within Farragut, roads with this designation often carry significant amounts of traffic that is generated beyond the current corporate limits. Mcfee Road, Grigsby Chapel Road, and Campbell Station Road north of the interstate are classified as minor arterials.

Major Collectors: Roadways that link arterials and distribute traffic onto minor streets. These streets also may provide direct access to major traffic generators. Virtue Road and Everett Road are major collectors.

Local Collectors: Roadways that link and distribute traffic between local and minor streets. Local collectors may also provide direct access to adjoining properties. Ideally these streets abut neighborhoods or are located within them. Local collectors in Farragut include Midhurst Drive, Sonja Drive, Jamestown Boulevard, Peterson Road, and Municipal Center Drive.

Local/ Minor Streets: Roadways with a primary function of providing direct access to adjoining individual properties. Most often these minor streets service residential uses over short distances and are characterized by limited traffic carrying capacities. The majority of Farragut's streets are classified as local streets.

Traffic Circulation Patterns

The traffic circulation pattern within Farragut relies heavily on the Town's major arterials. These routes carry a considerable volume of traffic, as measured by traffic counts in the area. Specific traffic count information is provided on Illustration 5. Major arterials in Farragut include Kingston Pike, Concord Road, Campbell Station Road, and Watt Road. Kingston Pike is the only current major arterial running east-west through the entire town. It roughly bisects the Town and carries a significant amount of through traffic from the surrounding area. Most of the Town's principal commercial areas are also located along

Illustration 4

Major Road Plan
December, 2000

Farragut, Tennessee



Legend

Functional Classification

- Interstate
- Major Arterial
- Minor Arterial
- Major Collector
- Local Collector
- Local Street
- Corporate Limits



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Map Prepared By:
State of Tennessee,
Local Planning Assistance Office
Knoxville, Tennessee
Geographic Information Systems

Map Information provided by:
Town of Farragut

December, 2000
This is not an Engineering Map

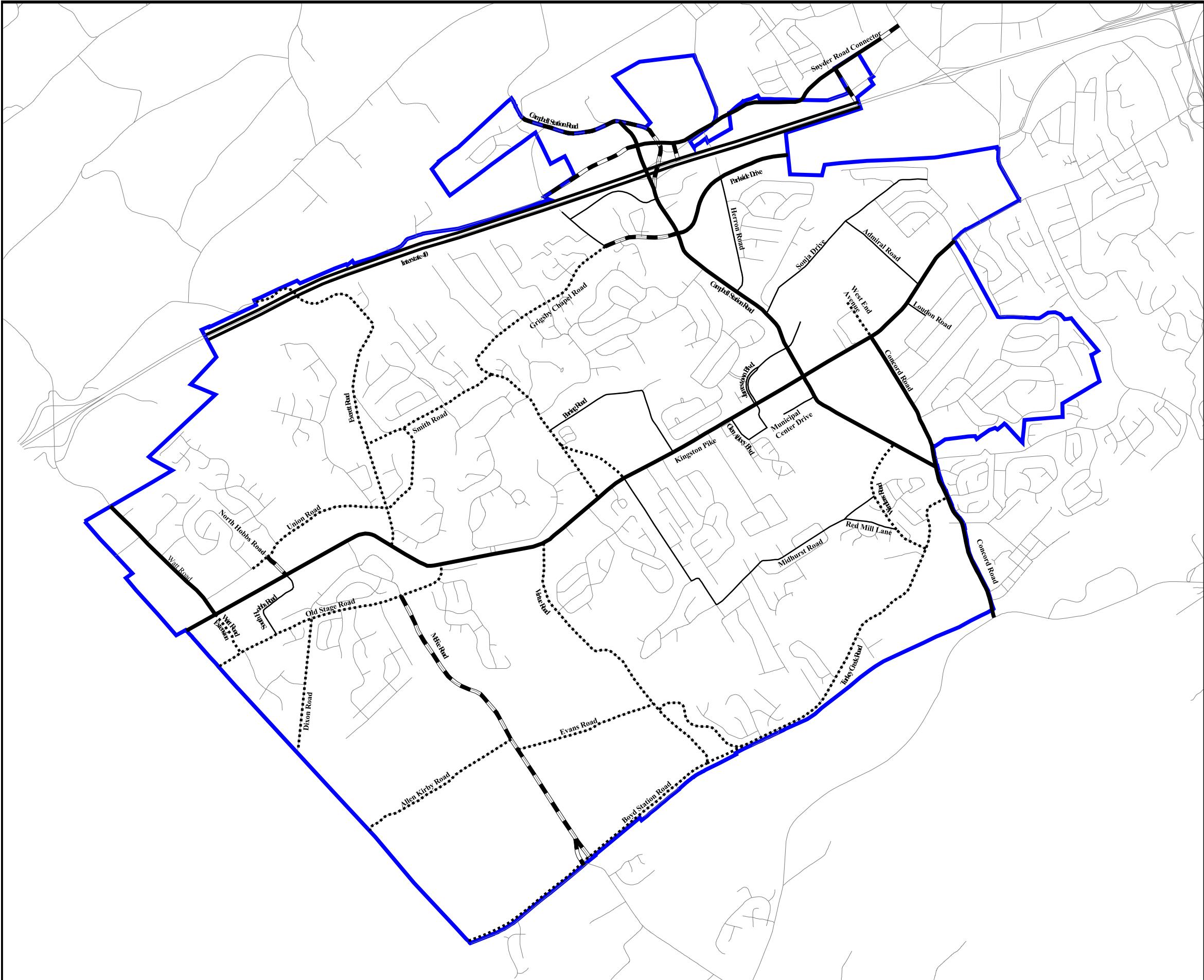


Illustration 5
Traffic Count
Locations and Data
1990 - 1999

Farragut, Tennessee



Note:

Traffic Counts provided by Knoxville/ Knox County Metropolitan Planning Commission (MPC). Traffic counts collected by MPC, Tennessee Department of Transportation, and Knox County Engineering and Public Works. Each number represents daily traffic volume in both directions at the specified location. Raw traffic counts adjusted for the day of week, month, and holidays.

Zeros (0) indicate that the location was not on the count list for that year.

NA indicates there was no count performed due to the location being under construction at the scheduled time.

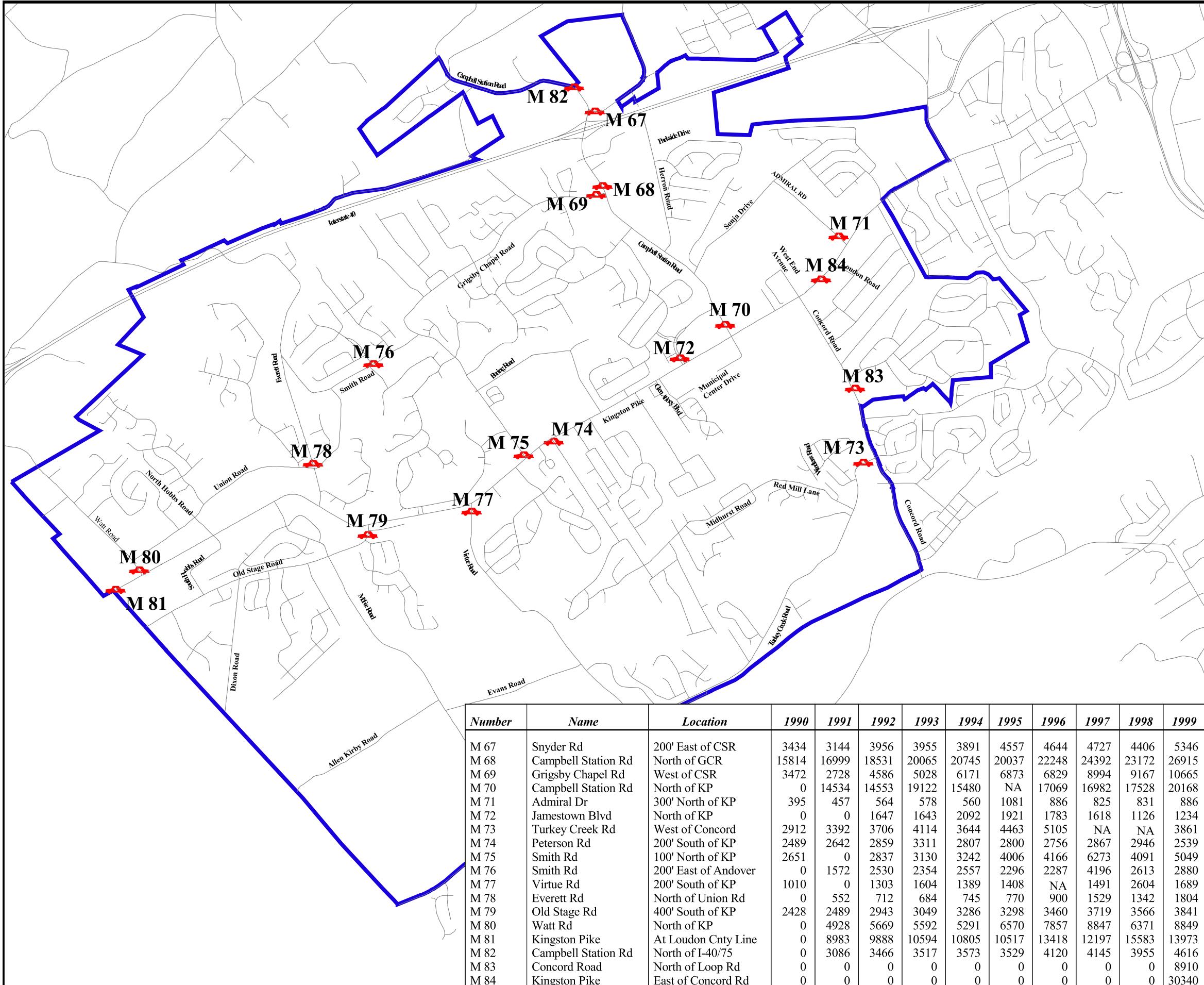


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Knoxville, Tennessee
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Kingston Pike, reinforcing its position as a central traffic corridor within the city. Parkside Drive is another east-west running major arterial. It parallels Interstate 40 and provides a link between Campbell Station Road and Lovell Road, which is located to the east in Knox County.

Concord Road, Campbell Station Road, and Watt Road are major arterials running north-south in Farragut. Campbell Station Road and Watt Road feed traffic northward directly onto Interstate 40. These arterials provide a vital link between Kingston Pike and the interstate. Concord Road links Kingston Pike with Northshore Drive, which is a main state road located on the southern edge of Town. In the mornings, most traffic moves north and east as residents commute to work in Knoxville and Oak Ridge. This circulation pattern is reversed in the afternoon as workers return home.

Traffic Generators

There are four primary traffic generators currently located within Farragut. They include the Farragut Primary School, the Farragut Intermediate and Middle Schools, and the Farragut High School. Traffic generated by these schools significantly impacts N. Campbell Station Road, Kingston Pike, and Concord Road. There are two peak periods of traffic loading associated with these facilities. The first of these occurs in the morning, as children report to school, and the second is in the afternoon, as school is dismissed. Overall traffic congestion is greatest during the morning period because it closely coincides with the area's general commuting pattern. No other developments or facilities were found to be large enough traffic generators to place an identifiable strain on the Town's road network.

Impediments to Traffic

Limited lane capacities and right-of-way widths on many of the Town's arterial and collector streets are the major impediments to traffic flow in Farragut. In many cases, the existing surface width along these principal roadways is insufficient to accommodate either existing or anticipated traffic volume. This problem is exacerbated by insufficient right-of-way widths along these same roadways. Without adequate rights-of-way the Town cannot readily make necessary street improvements.

Roadways of particular concern include McFee Road and Concord Road. A significant number of commuters from the Choto area, Loudon County, and Lenoir City utilize these roadways to access employment centers in Knoxville and Oak Ridge. This vehicular traffic, much of which originates outside of Farragut, strains these important transportation links. Unfortunately, the responsibility for funding necessary maintenance and improvements to these roadways falls on the Town rather than the larger region as a whole. Construction of the Campbell Station Road Extension, along with ongoing and proposed improvements to McFee Road, are expected to improve the Town's ability to efficiently move traffic north to Interstate 40/75. This should strengthen the growing commercial center located at the interchange. It is clear however, that additional road improvements will continue to be necessary as Farragut and the surrounding area grow.

Mass Transit

As in most suburban communities around the nation, the primary means of individual transportation in Farragut is the automobile. In spite of this, there is demand for some level of mass transit service. Knoxville Area Transit (KAT) provides limited express bus service between Farragut and downtown Knoxville. Direct commuter bus service is available between the Farragut park and ride lot located on N. Campbell Station Road, and the downtown Knoxville transfer station located at the intersection of Summer Place and Walnut Street. Two morning and four afternoon express buses are provided on this route. Riders wishing to transfer to other bus lines must do so at the downtown transfer station, the express service is non-stop between Knoxville and Farragut. The East Tennessee Human Resources Agency (ETHRA) and the Citizens Action Committee (CAC) also provide demand response transportation services for persons with disabilities subject to their eligibility under the Americans with Disabilities Act.

Pedestrian/Non-Vehicular Circulation

A well planned and constructed system of sidewalks and greenway trails can provide a safe means of alternative travel and can improve connectivity between residential and commercial centers. Farragut's network of sidewalks and greenway trails currently allows for some limited pedestrian circulation. Unfortunately, the overall network is fragmented because older subdivisions were not required to incorporate these transportation elements into their design. Improving the existing pedestrian system is a Town priority and new policies have mandated that sidewalks and/or greenway trails be included in all new developments. It is anticipated that the system will become increasingly interconnected as new development occurs and gaps in the existing network are filled. The existing sidewalk and greenway system is shown on Illustration 6.

Air/Rail/Port

Air transportation services in the Farragut area are available via two airports operated by the Metropolitan Knoxville Airport Authority. McGee Tyson Airport is a 2,000 acre facility located approximately twelve miles south of Farragut in Blount County. It has two parallel 9,000 foot runways and currently employs approximately 2,700 people. McGee Tyson airport currently supports approximately 100 flights a day and 11 major airlines. The Downtown Island Airport is a 150 acre general aviation facility located approximately three miles south of downtown Knoxville. Approximately 100 private and corporate aircraft are presently maintained at this facility.

There is no direct rail access currently available within Farragut. The Norfolk Southern Railway does maintain a freight line that runs along the Town's southernmost corporate limits. However, it must be accessed from industrial areas located in either Knoxville or Lenoir City. This line currently provides a direct connection between these two cities and the railroad's Mid-South and Shenandoah routes.

Illustration 6
Sidewalk and Greenway
Location Map
December, 2000

Farragut, Tennessee



Legend

- Sidewalks
- Park Trails
- Greenways
- Roads
- Corporate Limits

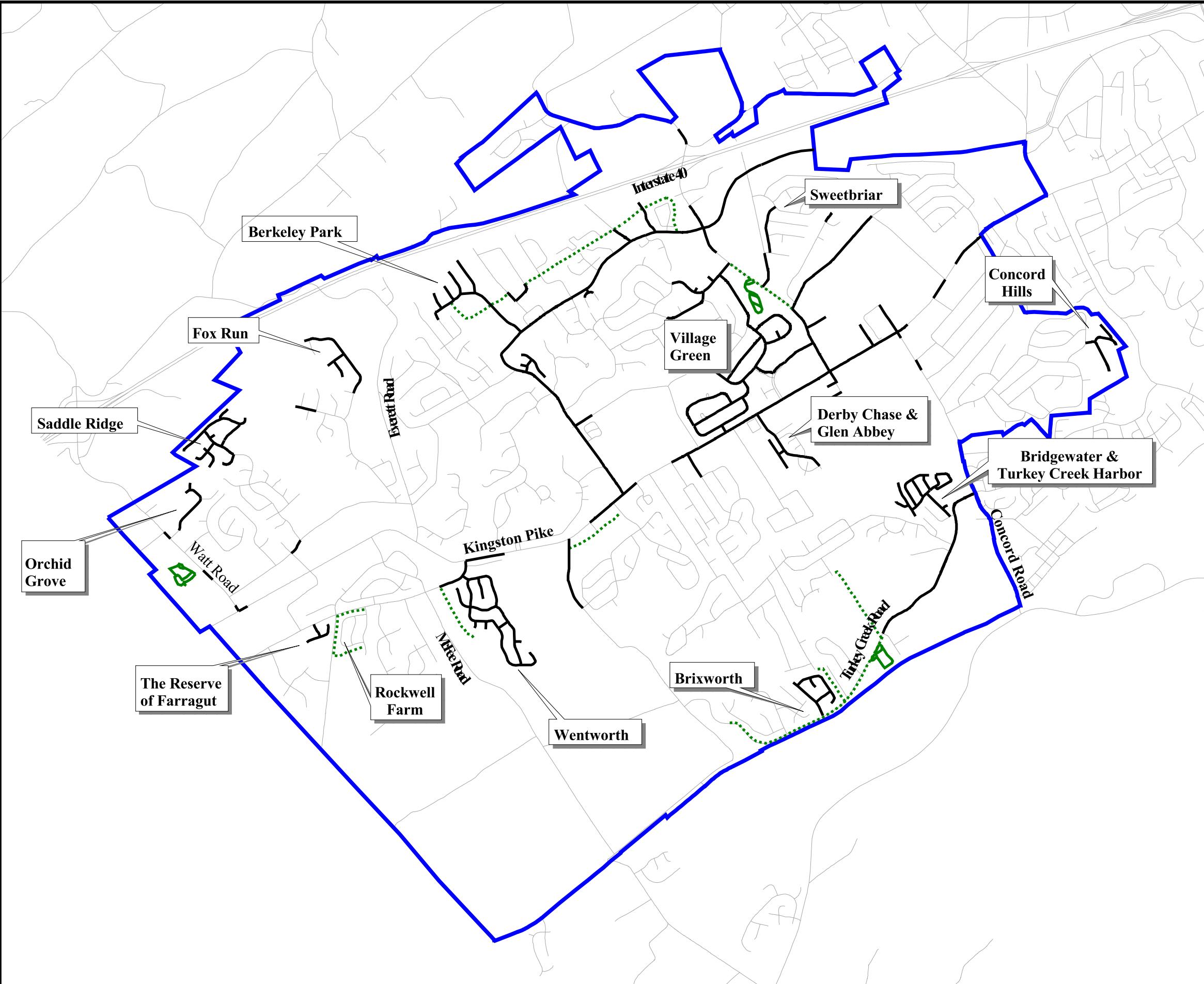


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Map Prepared By:
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Local Planning Assistance Office
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Map Information provided by:
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Farragut is located adjacent to Fort Loudon Lake, which does support commercial barge traffic. This impounded lake is under the control of the Tennessee Valley Authority and provides commercial transportation access to the larger Tennessee River system. There are however, no large commercial port facilities in the immediate Farragut area. The nearest ports supporting this type of commercial traffic along Fort Loudon Lake are located in Knoxville.

SUMMARY OF FINDINGS

The Town of Farragut is a suburban residential community. It encompasses a total of 10,361 acres of land, 59.1 percent of which has already been developed. Residential land uses dominate the existing land use pattern, accounting for 59 percent of all developed land within the Town. Traditional single family detached housing has been the principal form of residential development. It accounts for 3,477 acres or 95.8 percent of all residential land in Farragut. Development densities average around 1.7 units per acre, however recent single family subdivisions have developed at over three units per acre. This trend towards higher residential densities is expected to continue as development pressures in the area increase. In spite of this, the community will likely maintain its open suburban image. Farragut has made the availability of parks, open space, and other recreational facilities a community-wide priority. This contributes to the community's character and livability.

Commercial development in the Town has been concentrated in several clusters along Kingston Pike and in the regional commercial center at the Campbell Station Road, Interstate 40/75 interchange. Future commercial development is expected to occur primarily in an area along Kingston Pike east of Dixie Lee Junction, along Parkside Drive, and in an area north of the I-40/75 interchange.

Farragut contains a considerable amount of vacant land. The majority of this land is physically suitable for higher density development and it can be assumed that infrastructure improvements will occur as development demand increases. The sheer amount of this suitable vacant land, 3,535 acres, provides the potential for significant future growth. This growth could ultimately total over 6,300 additional residential units and 18,000 residents if current development trends continued. The provision of adequate public services and utilities will be vital to accommodate any future growth in the Town. This is particularly true of public water and sewer services. Fortunately, the area's utility districts have indicated that they should be able to support anticipated demands well into the future.

A municipality's transportation system also provides a service function that is essential for future growth and development. Traffic circulation patterns in Farragut rely heavily on the town's arterial streets. These arterials often carry significant amounts of traffic that is generated outside the Town limits. Internal factors also increase traffic loading on these important roadways. Major traffic generators in Town include four public schools that directly access either N. Campbell Station Road, Kingston Pike, or Concord Road. These schools introduce significant amounts of traffic on these routes during the morning

rush hour and in the afternoons. Local residential traffic is also forced onto arterial routes because many of the area's subdivisions are not internally connected to surrounding developments. Limited lane capacities and right-of-way widths on many of the Town's arterial and collector streets are the principal impediments to improving traffic flow around Farragut.

The Town's overall transportation system also includes alternative transportation options. Knoxville Area Transit (KAT) provides limited mass transit bus services to the area. Farragut has also been developing a pedestrian and non-vehicular sidewalk and trail system. This alternative circulation system is currently fragmented due to past development practices. The Town anticipates however, that it will become increasing interconnected as new developments occur and as gaps in the existing network are filled. Finally, area residents have access to air transportation services via two local airports operated by the Metropolitan Knoxville Airport Authority.

CHAPTER 6

THE DEVELOPMENT PLAN

INTRODUCTION

A primary concern for most progressive communities is whether they will be able to guide and provide for their future growth and development. The Farragut Land Use and Transportation Policy Plan, through the Development Plan presented in this chapter, establishes how the Town can best accommodate spatial growth during the ten year planning period. The Development Plan should serve as a general guide for the Town of Farragut and its projected growth area. It is derived from an analysis of past events affecting development, governmental structure, natural factors, socio-economic factors, existing land use, and the existing transportation system. It is also based on several major assumptions, factors, issues, and trends.

The Development Plan establishes general development goals that define the type and level of growth in the Town. Objectives based on these development goals, and policies to achieve these objectives, are presented in this chapter. These goals, objectives, and policies represent detailed guidelines for future development decisions. These goals, objectives, and policies are further reflected in the Major Road Plan.

This chapter will begin with a discussion of major assumptions and overall land use goals. The chapter then proceeds with a discussion of general objectives and policies and concludes with a listing of objectives and policies associated with more specific land use elements ranging from transportation to open space and vacant land.

MAJOR ASSUMPTIONS, FACTORS, ISSUES, AND TRENDS

The major assumptions, findings, issues and trends that will affect the future land use and transportation system of the Town are presented below. These assumptions represent the findings of the previous chapters and are the forces that frame the goals, objectives, and policies of this plan.

1. The local government will continue to support economic and community development and the Town will continue to have a strong planning program.
2. Natural factors, primarily topography and flood potential, limit some areas for development in the Town and its projected growth area.
3. The lack of regional planning authority limits the Town's influence and control over development in its adjacent projected growth area.
4. Steady population growth is projected for Knox, Loudon, and Blount counties during the planning period. The Town is expected to grow more rapidly than the remainder of Knox County.

5. The elderly sector of the Town's population is expected to increase in percentage to the total population.
6. A significant percentage of the population is expected to continue to have moderate and high incomes. In 1990, the median family income for the Town was \$60,137 as compared to \$26,010 in Knox County and \$24,807 in the State of Tennessee. Only 1.8 percent of the Town's population was below the 1990 poverty level as compared to 14.1 percent in Knox County and 15.7 percent in the state.
7. The majority of employment opportunities will continue to be outside the Town of Farragut. Employment in the Town will continue to be primarily in retail and service sectors.
8. It is projected that site locations for large scale and heavy industrial developments will primarily be provided by Knox, Loudon, and Blount Counties.
9. The public water and sewer systems within the Town will continue to be provided by First Utility District. The utility is expected to maintain adequate capacities to meet the demands of projected future development.
10. Aging or undercapacity water and sewer lines will need to be replaced and upgraded as growth occurs during the planning period.
11. As growth occurs, traffic will increase and major transportation improvements will be required to relieve congestion and provide safety.
12. There will be few instances of dilapidated or deteriorated housing given the Town's predominantly new housing stock.
13. The Town currently contains ample vacant general and regional commercially zoned properties.
14. The Town's Central Business District (CBD), or Town Center, located along Kingston Pike in the areas of Concord Road and Campbell Station Road will continue to experience development and re-development.
15. Annexations may become necessary in the future. Annexation activity should be guided by the Town's Growth Boundary Plan, and should primarily occur along major transportation arteries or by property owner request where municipal services are needed.

GENERAL DEVELOPMENT GOALS

To adequately plan for future land use, general development goals should be established. In the context of a future land use plan, a goal is a general statement reflecting objectives in the areas of land development, transportation, and service delivery which the community wants to achieve. The purpose of this land use plan is to provide the basis for a high quality living environment for the residents of the Town of Farragut.

The following goals are general statements that the Farragut Municipal Planning Commission believes to be the desires of the citizens regarding the future development and re-development of the Town.

1. To preserve, protect, and enhance the quality of life in Farragut while encouraging a harmonious and higher standard of development.
2. To preserve, enhance, and promote the environmental quality of Farragut, including clean air, water, and soil; to promote a diversity of landscapes and wildlife; and to provide ample access to natural areas and greenways.
3. To encourage infill development and re-development of existing areas, and to guide new development toward vacant land which has fewer natural physical restrictions and which has adequate infrastructure.
4. To provide efficient and effective vehicular and pedestrian transportation systems with appropriate linkages and capacities.
5. To work closely with utility providers to ensure utility services that effectively and efficiently meet and anticipate the needs of the municipality.
6. To provide adequate and efficient public facilities and services, including a diversity of cultural and recreational opportunities.
7. To maintain its primary position as a suburban community with commercial sites available for businesses that are compatible with surrounding residential areas, schools, and recreational areas.
8. To provide for adequate housing to meet the needs of all residents while ensuring that all residential developments provide pleasant and harmonious living environments, are served by adequate vehicular and pedestrian circulation systems, are served by adequate infrastructure, and are properly related to other municipal land uses.
9. To provide for an adequate supply of goods and commercial services with varied sites suitable for a variety of outlets.

OBJECTIVES AND DEVELOPMENT POLICIES

Both objectives and policies are utilized to achieve the goals established in this plan. Objectives are more specific, measurable statements of the desired goals. Policies represent rules or courses of action that indicate how the goals and objectives of the plan will be realized.

The objectives and policies contained in this document represent the official public policy guidelines concerning land use and transportation matters for decision making by the Town of Farragut. The policies are presented as guidelines to be followed by developers, builders, neighborhood groups, civic organizations, and other private and public interests engaged in and concerned about growth and development in the community. The policies are also presented so that interested individuals and groups can better anticipate the Town's decisions on future matters.

In the following section general development and growth management objectives and policies are presented. This section is followed by objectives and policies for each of the specific land use categories.

GENERAL DEVELOPMENT AND GROWTH MANAGEMENT

Growth has always been viewed as an inherent component of urban settlements. Most cities understand that growth is necessary for long-term viability and most encourage growth to varying extents. However, in more and more communities, the costs and benefits of continued growth have emerged as a public issue. There is often hesitation over accommodating further development with its consequences of greater numbers of residents and higher densities, economic expansion, rapid consumption of land, alteration of the natural environment, and intensified strain on public services and infrastructure.

The Town of Farragut anticipates and welcomes growth and understands its importance as a part of those forces which beneficially affect the community's quality of life. At the other end of the spectrum, the policy of growth at any cost has long-term detrimental impacts and is not supported by the Town.

The approach taken by Farragut will be that of managed growth. To guide general growth and development the following objectives and policies are adopted.

- A. Objective - Assure the protection and integrity of the natural environment by implementing measures to minimize the adverse impacts of development to soils, slopes, vegetation, wetlands, water quality, natural drainage systems, and other natural features.

Policies

1. Developments should be designed to integrate and protect natural drainage systems, steep slopes, mature vegetation, and any other type of environmentally sensitive areas into the overall design.
2. Ensure that areas less suitable for development, due to natural factors, are developed only when appropriate remedial measures are taken such as encouraging the clustering of development so as to preserve and protect sensitive areas.
3. Decisions on development proposals should be based on an analysis of soils, slope, depth to bedrock, impact on the drainage system, and location relative to flood prone areas.
4. The developer should have the responsibility for undertaking the necessary studies to prove the land's ability to support the proposed development, especially where the condition of the land is in doubt and it appears that an unsuitable condition might exist.

5. Areas located in designated floodplains should be developed only in conformance with National Flood Insurance Program guidelines.
6. Development should not proceed until its impact on the immediate drainage basin system is evaluated.
7. Major natural drainage ways, which are a part of the natural system of dispersing storm water run-off in any drainage basin, should be protected from encroachment.
8. The Town should ensure that the pre-development run-off discharge rate of any site is not increased as a result of development. Proposed future developments should not increase flooding potential, substantially alter drainage patterns, or degrade water quality.
9. All development proposals should be assessed for appropriate design, installation, and maintenance of all necessary drainage facilities and appurtenances.
10. All development proposals should be assessed for appropriate design of storm water management practices to ensure high water quality in surface runoff.
11. Groundwater should be protected by restricting the use of septic tanks to appropriate soil types and land formations. New development should be directed to areas on the public utility sewer system where at all feasible. As time and resources allow, sewer systems should be extended to non-sewered areas.
12. Development proposals involving soil disturbance should be in conformance with appropriate sediment and erosion control measures.
13. Areas with steep slopes should be preserved as open space if development would cause soil erosion and/or water quality degradation, slope instability, or where the terrain possesses special scenic or recreational value.
14. If steep slopes are developed, adequate engineering documentation should be required to prove that no adverse impacts would occur to housing construction, road stability, drainage, erosion, or overall slope stability.
15. Slopes created as a part of new development should not compromise long term stability and should be constructed so that they are easily maintained.
16. Extreme cut and fill proposals should be discouraged if alternative designs would allow for reasonable uses of land.
17. Sites should not be cleared and graded until the development is ready to proceed. If development is initiated and is later delayed, measures should be in place to minimize erosion and other negative impacts to the natural environment.
18. Mature vegetation, particularly trees, should be protected. Replanting should be required where existing vegetation is removed or disturbed during construction.

19. Whenever practical, vegetation should be used as an alternative to man-made devices for buffering, screening, erosion control, and water quality protection.
 20. The Town should develop appropriate criteria to identify environmentally sensitive and other valuable areas. Appropriate measures to protect these important areas should be developed and implemented.
- B. Objective - Protection and enhancement of the community's present and future livability.

Policies

1. Land use planning, site planning, and urban design criteria should be utilized to promote pleasant, functional, and understandable relationships between land uses.
 2. Planning for community facilities, services, and infrastructure should be based on the principle of maintaining or increasing the current levels of service.
 3. The Town should address ways to provide a variety of housing opportunities.
 4. The Town should develop criteria for assessing the impacts of development projects on the continued livability of the community. For growth management purposes, these standards or criteria should assess:
 - a. Environmental impacts such as water quality degradation, destruction of wetlands, loss of wildlife habitat, etc.
 - b. Social impacts such as public safety, availability of recreational and other community services, etc.
 - c. Impacts to public services, facilities, and transportation systems; including water supply and treatment capacity, sewer treatment capacity, Average Daily Traffic (ADT) counts on major roads, etc.
 - d. Economic and fiscal impacts such as budget constraints, job creation or loss, etc.
- C. Objective - Coordinate the demand for public services with the Town's capacity to supply them.

Policies

1. All new development, whether public or private, should include appropriate infrastructure which should be properly installed at the developer's expense.
2. Appropriate infill development should be encouraged to enhance existing development patterns and to make more efficient use of existing services and utilities.

3. Developments with demands beyond the existing levels of public services, such as transportation, utilities, parks and recreation, and police and fire protection should only be allowed to proceed when such infrastructure and services can be adequately provided and maintained.
4. Public cost-sharing for strategic area-wide infrastructure extensions should be considered when a mutual benefit will be bestowed upon the citizens of Farragut and the proposed development.
5. All future expansions or extensions of the Town's services, facilities, or transportation infrastructure should be in conformance with a plan which phases the improvements in segments suitable to the Town's ability to pay and maintain.
6. Strategic infrastructure provided by the Town should be used as a tool to direct or discourage development in specific areas.
7. To aid developers in determining those areas most conducive to development, base maps of the environmentally sensitive areas and infrastructure system should be periodically updated.
8. In addition to compatibility with surrounding land uses, the availability and capacity of existing and planned transportation networks, other public services, and utilities should be used as criteria in determining the location of higher intensity uses in the Town and in decisions concerning annexation.

D. Objective - Preservation of the Town's fiscal stability.

Policies

1. Fiscal decisions concerning major capital improvements and expenditures should be based on a Community Facilities Plan and a multi-year Capital Improvement Plan.
2. The Town should promote fiscal stability through the practice of sound land use planning and decision making.
3. The "Farragut Urban Growth Boundary Report, June 1999" should be used to guide priorities and criteria for long-range urban fringe studies through which the Town will consider annexation proposals.

TRANSPORTATION

A transportation system includes facilities for motor vehicles, bicycles, and pedestrians. The future transportation system in Farragut and its projected growth area will be affected by a number of factors. These factors include the existing street pattern, major impediments to traffic circulation, location of major traffic generators, parking needs, growth trends, construction of new thoroughfares, and the location preferences of new development. Although the municipality cannot control all factors which will influence its future transportation system, it can provide some direction.

Land development without the extension of adequate transportation facilities is costly to the general public. Levels of service decline and safety concerns are intensified because of the increased use of inadequate facilities. In addition, delayed improvements to such facilities create disruptions for local residents. Furthermore, when improvements are required to be made prior to development, limited public funds are not spent to correct development created problems.

The following objectives and policies are presented as a guide for achieving an adequate and efficient future transportation system:

- A. Objective - Provide a transportation system that will adequately meet future needs for growth and development.

Policies

1. All new development should include an adequate transportation system that is properly installed at the developer's expense.
2. All new Arterial and Collector streets should be located in a manner that will minimize disruption to neighborhoods, open space-recreational areas, and/or commercial areas.
3. The Town should encourage alternative modes of transportation that promote sustainable development efforts. Whenever possible, these actions should meet current transportation needs while providing flexibility to address future issues.
4. Sidewalks, bikepaths, greenways, and other pedestrian ways should be extended and improved around schools, parks, and on major streets in accordance with the Town's Pedestrian Circulation Plan.
5. All developments should be connected with sidewalks, bikepaths, greenways, or other pedestrian ways.
6. The Town should work to establish a fully integrated network for non-vehicular-based transport.
7. All segments of the transportation system should be designed and located to meet both present and anticipated future demands.
8. Substandard public streets in the Town should be upgraded or improved in accordance with a street improvements program.
9. Off-street parking facilities should be required for all land uses.
10. On-street parking should be permitted only where adequate street widths are available and where such parking will not reduce the current level of service.

- B. Objective - Provide appropriate standards and guidelines for the construction of new streets and other transportation facilities.

Policies

1. Streets should be related to the topography and designed to minimize points of traffic conflict and turning movements.
2. All new streets and other access ways should be designed and located in a manner which offers the maximum protection from flood and erosion damage.
3. All new streets and other access ways should be designed with drainage facilities that are adequate in size to handle runoff from both existing and anticipated developments.
4. All streets and other access ways should be designed so as to provide the least interference with natural drainage ways.
5. Pedestrian and bicycle elements should be incorporated into the design of future roadways.
6. Crosswalks and other pedestrian crossing points should be incorporated into the design of arterial and collector streets, such as at bridges, underpasses, and intersections.
7. Future roadways should be designed to incorporate appropriate landscaping to heighten the aesthetic and functional appeal to both the motorist and surrounding residents or businesses.
8. Where appropriate, traffic calming techniques should be incorporated into new local and collector street designs.
9. In order to promote safe and efficient movement of traffic, access to adjacent properties from arterial and collector streets should be limited.
10. Street signage and other safety features should be required at the time of development.
11. Where safety concerns are involved, major transportation arteries and intersections in commercial areas should have street lights installed.
12. So as to reduce the negative effects of lighting, residential street lighting standards should be developed.

UTILITIES

Land development, without the extension of adequate utilities, is costly to the general public and does not make efficient use of the limited land available for development. In order to promote development that minimizes public expenditures, the extension of utilities should be coordinated with sound land use planning principles. Therefore, the following objectives and policies should be adopted as guidelines for the operation and extension of public utilities:

- A. Objective - Coordinate with all utility providers to ensure that adequate public water, sewer, natural gas, electricity, and communication facilities are readily available within the Town.

Policies

1. All new development should include adequate utilities, which are properly installed at the expense of the developer.
2. The Town should coordinate with First Utility District to ensure that the utility's water and sewer systems are adequate to meet current and future needs.
3. The health and safety of residents should be protected through the production of state approved potable water, along with the efficient collection and treatment of wastewater in all areas of the Town.

- B. Objective - Coordinate with the controlling utility provider to require appropriate standards and guidelines for utility improvements and extensions.

Policies

1. Adequate utilities should be extended into urbanizing areas of the municipality on a prioritized basis. These extensions should meet all appropriate health standards.
2. Water and sewer lines of adequate size and location should be required in all new developments and redevelopments.
3. All utilities should be located so as to minimize future disruptions to roadway integrity.
4. The water distribution system should be periodically evaluated to ensure adequate pressure for fire fighting and that a suitable number of fire hydrants are present in all developed areas. Identified system deficiencies should be corrected.
5. The use of underground electrical utilities should be required wherever feasible.
6. Utility structures for the storage of equipment, pumps, or similar materials should be adequately buffered and landscaped so as not to detract from the surrounding area.
7. The location of telecommunication towers should be planned so that the structures are visually screened from nearby residential developments.

- C. Objective – Ensure that proper stormwater control measures and infrastructure are provided throughout the Town.

Policies

1. The Town should require new developments to integrate their storm water drainage systems into the immediate drainage basin system.
2. The Town should require appropriate maintenance and repair of any privately controlled drainage facilities or appurtenances which tie into any portion of the public or other existing natural drainage systems.
3. For traffic safety on streets and in parking lots, underground storm water drainage systems should be provided in all new developments and redevelopments.

RESIDENTIAL

A large portion of the developed land in Farragut is devoted to residential uses. A very small percentage of the existing housing stock is vacant at any given time. Based on the population projections provided by the University of Tennessee, as detailed in Chapter 4, it is anticipated that approximately 800 new housing units will be needed over the next ten years. However, as many as 3,600 units could be needed if the actual growth rate experienced over the past ten years were to continue.

To ensure the most appropriate development of existing and future residential areas in Farragut and its projected growth area, the following objectives and policies are adopted:

- A. Objective - Provide a variety of housing types and densities for a wide-range of family incomes, household sizes, and life-styles.

Policies

1. The Town should encourage a mixture of housing types ranging from single-family detached to higher density attached single-family and multi-family developments.
2. The Town, through its policies, should direct new residential development to areas that are free of significant environmental constraints.
3. Land use controls should be used to foster a variety of housing types, densities, and building arrangements which are compatible with the natural landscape and which minimize the need for new infrastructure.
4. The Town should encourage the preservation and revitalization of older neighborhoods.
5. The Town should ensure that the existing housing stock continues to be maintained and that new residential construction is developed under appropriate standards and guidelines.

6. Infill development should be encouraged but only in locations which are compatible with surrounding residential developments.
7. New residential development should be discouraged in those areas where streets and other infrastructure are unavailable or inadequate to support such development.
8. New residential development should be designed to encourage the neighborhood concept and should be easily accessible by multi-modal means to either collector or arterial roadways and nearby activity centers.
9. In order to protect environmentally sensitive areas, the Town should provide for the clustering of units without increasing the overall density permitted within a particular zoning district.
10. The Town should encourage higher density development along major traffic corridors, with easy access to retail business, pedestrian amenities, cultural activities, schools, and parks.
11. Higher density residential developments should be planned and designed to mitigate negative impacts to adjacent properties.
12. Transitional land uses and design elements, such as buffer strips, should be utilized between residential neighborhoods, commercial areas, and/or other incompatible developments in order to enhance land use compatibility.

COMMERCIAL AND PRIVATE SERVICES

The C-1 General Commercial District, located primarily along Kingston Pike, has been the focal point for commerce and private services in Farragut since the early years of the community. Like many younger suburban communities, the area has experienced some strip development. However, most commercial developments occurring since Farragut's incorporation have been clustered with their access to Kingston Pike limited.

Admiral Point (Bi-Lo), Kohl's Center at Glen Abbey Boulevard, Farragut Towne Square (Ingles) at Federal Boulevard, and the Watt Road and Dixie Lee Junction area have all been developed under this clustering policy. In recent years there have been efforts to provide improved access controls in the General Commercial District along Kingston Pike. This should improve safety while maintaining access to businesses.

The C-2 Regional Commercial District located along N. Campbell Station Road at the I-40 interchange serves primarily as a travel oriented business area. Hotels and motels, convenience and fueling businesses, and restaurants oriented to interstate travelers dominate the commercial development at this location.

The O-1 Office District is located adjacent to commercial districts which abut arterial roadways. This district creates a transitional area between more intensive and less intensive land uses. The district provides office space for professional and personal services, which

are intended to serve both local neighborhoods and the larger community while minimizing traffic flow disruptions and negative impacts to adjacent residential areas.

The vital commercial and service areas of the community should be protected and enhanced to ensure their continued development in a planned environment. This action will strengthen the economy of the entire area and maintain revenues necessary to operate the Town government.

To guide the continuation and expansion of these essential commercial and service activities, the following objectives and policies are adopted:

- A. Objective - Take appropriate measures to ensure that the Town of Farragut remains a viable center for commercial, professional, and personal services.

Policies

1. The Town should encourage and support infill development within the existing clusters of commercial development.
2. The Town should encourage the adaptive reuse of existing structures and the re-development of sites in older commercial areas.
3. The Town should promote the Kingston Pike corridor, between Glen Abbey Boulevard and Concord Road, including the Village Green commercial complex, as the “Town Center” area to serve as a community focal point.
4. Future commercial developments and redevelopments should interconnect interior parking lots and accessways.
5. The Town should encourage pedestrian connectivity between commercial buildings and from such buildings to adjoining streets, nearby residential areas, and other activity centers.
6. The Town, in conjunction with the Chamber of Commerce, should recruit and retain businesses.

- B. Objective - Ensure that all new commercial development meets appropriate standards and guidelines.

Policies

1. All commercial developments should be designed in compliance with appropriate site development standards.
2. Commercial development should be approved only in those areas where infrastructure is available and adequate to support such development.
3. Commercial development should be designed to minimize negative impacts to the existing transportation system and the natural environment.
4. Continuous strip commercial development should be discouraged in favor of cluster developments with limited vehicular access points.

5. All new large-scale commercial developments should be located on shared access easements, shared driveways with controlled ingress and egress points, or frontage roads when feasible.
 6. Commercial uses that are high-volume traffic generators should be located on arterial roadways.
 7. All commercial developments should be provided with an adequate number of off-street parking spaces.
 8. Commercial developments should be designed to minimize negative impacts on nearby residential developments.
 9. New commercial developments and redevelopments should be aesthetically pleasing and visually compatible with existing surrounding uses.
 10. Landscaping or other screening should be provided to soften the visual impact of certain unavoidable and incompatible aspects of commercial development.
- C. Objective - Ensure that areas designated for commercial and office development are consistent with the Town's long-standing pattern of development.

Policies

1. The area along N. Campbell Station Road between the entrance to Farragut High School and the northern property line of Farragut Primary School serves as the gateway to the Town and no commercial development should occur in this area.
2. The Kingston Pike road frontage between Sugarwood Drive and Old Stage Road should remain residential in character and serve as a break between the existing commercial clusters along Kingston Pike.
3. The Town should encourage and promote the clustering of commercial development on the east side of S. Campbell Station Road extension, between Concord Road, the cemetery, and the floodway.
4. Concord Road between Turkey Creek Road and Second Street should remain residential in character. No commercial development should be allowed to occur in this area.
5. No commercial development should be allowed to occur west of the North Fork of Turkey Creek on Grigsby Chapel Road.

RECREATIONAL, CULTURAL, EDUCATIONAL, AND OTHER PUBLIC SERVICES

Recreational, cultural, educational, and other public services in Farragut consume a slightly larger percentage of land than in most small cities. Anchor Park on Turkey Creek Road, Mayor Bob Leonard Park on Watt Road, and Campbell Station Park next to the Knox County Library located on N. Campbell Station Road are included in this land use category. An additional park is planned on McFee Road in the southwest quadrant of Town. Four Knox County schools, a primary, intermediate, middle, and high school, are also located within the Town. Together, these schools serve students from the entire southwestern portion of the county and represent a significant land use in the community.

The clustered location of Campbell Station Park, the library property, and the primary school, with its spacious grounds, provides a pleasant feeling of open space along N. Campbell Station Road. This public open space area extends from the primary school to the high school entrance and creates a valuable break between the Regional Commercial District at I-40 and the heart of Farragut's General Commercial District at Kingston Pike.

The location and design of these facilities can have a significant impact on a community. Therefore, the site design process for recreational, cultural, educational, and other public service uses should pay particular attention to the following items: the location of buildings in relation to parking and service areas; the relationship of buildings to existing and proposed streets; adjoining land uses; and the natural beauty of surrounding areas. The objectives and policies to be used as guidelines for these uses are as follows:

- A. Objective - Provide recreational, cultural, educational, and other public services which meet the specific needs of Town residents.

Policies

1. The Town should prepare a comprehensive community facilities plan based on local standards and location criteria.
2. Public facilities and services should be improved and expanded in accordance with a community needs assessment and adopted Capital Improvements Program.
3. The Town should pursue constructing a Community Center/Cultural Arts Center.

- B. Objective - Provide a diversity of quality recreational, athletic, and cultural opportunities.

Policies

1. Decisions concerning the provision of recreation facilities should be guided by a community facilities plan and should be consistent with the Capital Improvements Program.

2. The Town should maintain a regularly updated recreation plan, which defines present and future needs for both recreational facilities and programs.
 3. Community, neighborhood, and pocket parks should be developed and appropriately located within the Town.
 4. Environmentally sensitive areas, such as wetlands and flood plains, should be incorporated into community, neighborhood, and pocket parks.
 5. The Town should promote the joint use of recreational, cultural, educational, and other public facilities.
 6. The Town should promote efforts to document, preserve, and protect historic sites and structures.
 7. The Town should use its resources and facilities to support and encourage cultural activities.
 8. The Town should recognize the contributions of religious and educational institutions in the areas of cultural, athletic, and all recreational programs. Where appropriate, the Town should coordinate the efforts with publicly supported cultural institutions, events, and performances.
- C. Objective - Encourage recreational opportunities which are coordinated with and integrated in the Town's long-term multi-modal transportation goals

Policies

1. Accommodations for safe pedestrian and bicycle circulation throughout the Town should be included in all road projects.
2. The Town should promote the construction of commuter lots near major roadways and the community-wide greenway system.
3. The Town should enhance opportunities for passive recreation through the continued promotion and development of a community-wide greenway system which consists of walking trails, biking trails, and sidewalks.
4. The Town should require that all new developments be linked to the community-wide greenway system and/or create opportunities for future links to the greenway system.
5. The Town should promote linkages between the Farragut greenway system and other greenways located outside of Town.

OPEN SPACE AND VACANT LAND

Farragut's land use survey indicated that there were 4,136 acres of vacant land in the Town. As the community grows, a significant amount of this vacant land will be converted to urban development. Fortunately, the majority of this land can be developed as utilities and streets are extended.

Drainage problems and unsuitable soils are the principal limiting factors to further development in these areas. Their impacts on development are, however, localized and in most cases can be resolved through proper engineering. Some of this vacant land will continue to be utilized as farmland or open space until suitable infrastructure is available. To guide future development of the Town's vacant land base, the following objectives and policies are adopted:

- A. Objective - Ensure that adequate open space is provided in the municipality to enhance community character, livability, and aesthetic quality.

Policies

1. Appropriately located public open spaces and general recreational uses should be provided to serve local residents and visitors. These areas should be readily accessible and designed to serve all age groups.
2. The Town should continue to ensure that adequate amounts of open space areas are available for future populations.
3. Appropriately located and useable private open spaces should continue to be designated at the time of property subdivision.
4. Places of rare natural beauty and areas of significant historic interest should be preserved and maintained.
5. All publicly owned land should be examined for its potential open space or recreational use before being sold or disposed of by the Town.

- B. Objective - Ensure that appropriate standards and guidelines are followed for the development of vacant land and the provision of open space.

Policies

1. All new development should be in conformance with the objectives and policies of this plan.
2. The Town should encourage the use of creative development designs to preserve and protect environmentally sensitive areas.
3. Whenever possible, areas of excessive slope should be preserved as open space.
4. To control erosion and storm water runoff and enhance the aesthetic value of the landscape, mature vegetation, especially along stream banks and other environmentally sensitive areas, should be protected from indiscriminate removal.
5. Vegetation should be used as an alternative to man-made devices for buffering, erosion control, and water quality protection.
6. All development should be consistent with the Town's policies and ordinances regarding tree preservation.

7. Filling and excavation in floodplains should only be allowed when consistent with National Flood Insurance Program regulations, and only after careful review of appropriate alternatives.
8. Within officially designated floodways, the Town should encourage light recreational and open space uses such as greenways.
9. The Town should develop appropriate criteria and measures to provide for the identification, protection, and enhancement of environmentally sensitive areas.

CHAPTER 7

PLAN IMPLEMENTATION

INTRODUCTION

In order for this plan to be effective, it is important that certain enforcement measures be undertaken to assure its implementation. Several methods for implementation of the objectives and policies developed in this plan are reviewed in this chapter. Many of these methods for implementation are already being utilized by the Town. The planning commission and the Board of Mayor & Aldermen may, however, need to examine the effectiveness of current practices or regulations in achieving the stated objectives and policies. Where the identified methods are currently not sufficient, the Town should consider taking the appropriate steps to make the necessary changes.

METHODS FOR IMPLEMENTATION

There have been ten methods of plan implementation identified for Farragut to utilize in the execution of this plan. Each of these are reviewed within this section.

Planning Commission Project Review

Under *Tennessee Code Annotated* Section 13-4-104, after the adoption of a plan, no public improvement project can be authorized or constructed in the municipality until and unless the location and extent of the project has been submitted to the planning commission for its review. This review authority enables the planning commission to ensure that all public improvement projects are in compliance with the plan.

Zoning

Zoning is a legal mechanism that can assist the municipality in implementing a land use and transportation plan. A zoning ordinance is designed to regulate the type and intensity of land use. It divides a community into specific districts corresponding to the intended use of the land as guided by the policies of the Land Use and Transportation Policy Plan. For each district, zoning regulates development characteristics such as the location, height, bulk, and size of buildings and other structures, the percentage of the lot that may be occupied, the sizes of yards and other open spaces, and the density of population. Zoning can assure the proper location of residential, commercial, and semi-public uses. It can protect street rights-of-way so that future widening is feasible. It can also prohibit overcrowding of building lots. In addition, zoning can help stabilize property values and can help prevent deterioration of neighborhoods.

Zoning regulations should reflect the actual goals of the community and should be changed whenever necessary in order to continue to accomplish those identified goals. Zoning regulations were first adopted by the Town of Farragut in 1980. These regulations have been amended over time and are current.

Subdivision Regulations

Subdivision regulations, used in a coordinated manner with zoning, are another legal mechanism to carry out the recommendations of the Land Use and Transportation Policy Plan. Like zoning, these regulations control private development. They serve as guidelines for the conversion of raw land into building sites. Subdivision regulations provide the guide by which the planning commission can review all proposed plats for subdivision in an equitable manner. These controls are necessary if sound, economical development is to be achieved. Through enforcement of these regulations, the design and quality of subdivisions will be improved, resulting in better living conditions and greater stability of property values for the individual property owner. Such controls over land subdivision ensure the installation of adequate utilities that may be economically serviced and maintained. These controls are also used in providing a coordinated street and pedestrian network and ensure that sufficient open space for recreation and other public services is provided.

Like the zoning regulations, the subdivision regulations should reflect the actual goals of the community and should be changed whenever necessary in order to continue to accomplish those identified goals. Subdivision regulations were first adopted by the Farragut Municipal Planning Commission in 1980. These regulations are up to date.

Municipal Code

The Farragut Municipal Code includes a wide variety of ordinances including the Erosion Control Ordinance, the Drainage Ordinance, the Tree Protection Ordinance, the Driveways and Other Access Ways Ordinance, and the Sign Ordinance. Like the zoning and subdivision regulations, these regulations should reflect the actual goals of the community and should be changed whenever necessary in order to continue to accomplish those identified goals. These ordinances primarily assist in ensuring a higher quality of development.

Codes Enforcement

There are various types of codes that municipalities can adopt to ensure that construction standards are sufficient to protect the health and safety of occupants. The housing code is designed to ensure that existing dwellings are safe, sanitary, and fit for human habitation. Other codes, such as building, plumbing, electrical, gas, mechanical, and fire codes, provide minimum standards for the construction of new buildings and facilities, and the alteration of existing structures and facilities. These codes are uniform in character and are applied to the municipality as a whole.

A system of codes function only if accompanied by an inspection system. Code enforcement ensures the adequacy of new residential, commercial, and semi-public structures while also detecting and preventing the deterioration of existing facilities through periodic inspection. By preventing or reducing blight, property values are more stable and tax bases are protected.

Building codes were first adopted by the Farragut Municipal Planning Commission in 1980. These codes are current and the Town has a professional codes enforcement staff.

Public Improvements Program and Capital Budget

A public improvements program and capital budget provides the means through which the local government can effectively undertake a properly planned and programmed approach toward utilizing its financial resources in the most efficient way possible to meet the service and facility needs of the community. The public improvements program identifies recommendations for capital improvements, estimates their costs, and identifies possible financing alternatives. The capital budget is a method of developing and scheduling a way to finance the projects identified in the public improvements program.

The Town currently adopts a five-year capital improvement plan. This plan not only identifies capital projects to be worked on during the next five years, but also identifies projects beyond the five-year planning period. Identifying such short-term and long-term projects helps keep the Board of Mayor & Aldermen, the planning commission, and the citizens abreast of what is hoped to be accomplished during the current fiscal year and also in the future.

Infill Development and Redevelopment

Utilization of existing, developable vacant land and facilities within a municipality is a much overlooked mechanism to implement a land use plan. In most cases, these areas tend to be served by existing infrastructure such as streets, water, sewer, electricity, and gas; thereby eliminating normal costs associated with additional development. An abundance of vacant developable land is a costly luxury to a municipality. It results in under utilization of infrastructure due to low density development. Infill development of serviced areas will expand local revenue sources while better utilizing the existing infrastructure system. Infill development is often best encouraged by reducing out lying development alternatives by not rezoning lands prematurely.

Annexation

Historically, as the population of municipalities increased, so has that of the suburban fringe areas that surround them. Residents and businesses are attracted to these fringe areas primarily because they can reap many of the benefits which municipalities provide without having to bear the costs. Serious consequences such as substandard services and infrastructure, inequitable distribution of tax burdens and benefits, and undesirable

development resulting from non-existent or poor planning and zoning controls, can develop from a failure to annex.

Municipalities can best plan for and deliver the urban services required by fringe areas through annexation. If a municipality fails to expand its corporate limits, development will locate in the urban fringe where it will contribute little to the finances of the municipality, while increasing pressure on the facilities and services provided by the municipality.

Since its incorporation, Farragut has had a very conservative approach to annexation. Land has primarily been annexed through referendum or by ordinance when a request has been made by a single property owner. No significant annexations have occurred in the Town since 1990. Additional areas for annexation were identified in the June 24, 1999 Farragut Urban Growth Boundary Report. This report identifies less than 600 acres for potential annexation during the next twenty years. Farragut's approved Urban Growth Boundary is depicted on Illustration 7.

Citizen Participation

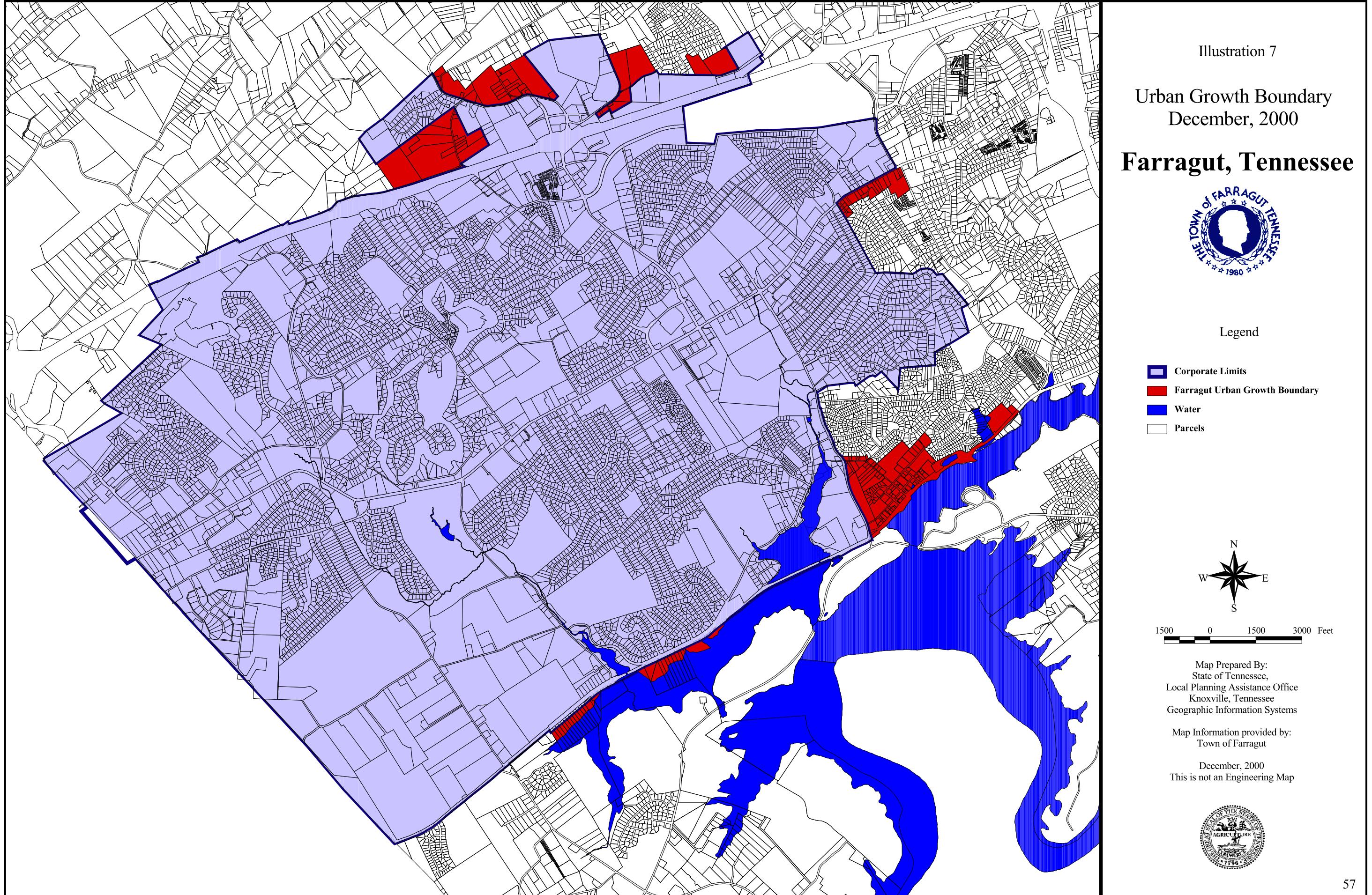
Citizen participation is an important factor in determining the success of a land use plan. An informed citizenry that is willing to work to achieve the goals, objectives, and policies set forth in this plan can be a tremendous asset. Citizens can offer support for programs designed to achieve community goals. Successful citizen participation can be achieved through a public education program designed to inform the community of the various purposes and reasons for the actions of both the planning commission and the Board of Mayor and Aldermen. Specific efforts should be taken to obtain input from the general public through organizational public meetings, public hearings, and surveys. News articles should also be utilized to educate the public regarding the work activities of the planning commission.

Local Leadership

The Farragut Board of Mayor and Aldermen bears most of the responsibility for implementation of this Land Use and Transportation Policy Plan. As the municipality's decision makers, they have the authority to adopt appropriate implementation strategies that will fulfill the goals, objectives, and policies developed in this plan. It is important that the legislative body maintain a close working relationship with the planning commission so that the planning process is properly coordinated.

IMPLEMENTATION SCHEDULE

The Farragut Land Use and Transportation Policy Plan is an advisory document intended to serve as a guide for the development of the municipality over the next ten years and beyond. Modifications and amendments to the implementation tools listed above will be necessary if the goals, objectives, and policies of this plan are to be achieved. Many of the



goals, policies, and objectives can be implemented by assigning existing town staff, addressing issues with legislation, or continuing existing programming.

Each year the Board of Mayor & Aldermen develops a Fifty Item Work Program. The purpose of this work program is to identify and prioritize what needs to be accomplished during the fiscal year. As part of the process of establishing the Fifty Item Work Program, the Board should review the goals, policies, and objectives of this plan and determine what should be accomplished when.

CHAPTER 8

SUMMARY OF PLAN RECOMMENDATIONS

Based on plan findings and goals of the community, the following summary of plan recommendations is provided to serve as a guide for Farragut community leaders and others in making future decisions regarding land use, transportation, and community facilities important to the economic and physical development of Farragut.

Maintain an active planning commission to consistently enforce zoning and subdivision regulations in a fair and equitable manner.

Continue to have the planning commission review all commercial, office, multi-family, and recreational site plans so that the citizens can maintain a high level of involvement in the development activities of the Town.

Maintain, through planning and land use regulation, the spacious open character of Farragut as it grows residentially and commercially.

Require all developments to be connected with pedestrian and bicycle links.

Incorporate sidewalks and trails into all road construction projects.

Promote the safety of the road network by directing growth toward areas of adequate roadways.

Encourage all development to proceed in an environmentally sound and sensitive manner. In addition to preserving the aesthetics of the area, such practices will also save money in the long run for not only the future property owners, but also the Town.

Encourage a variety of new residential developments.

Encourage infill commercial development.

Encourage redevelopment of existing structures and/or sites in older commercial areas.

Encourage expansion of the park system and increase access to recreational opportunities thru grant programs.